CONTENTS OF SUPPLEMENT.

PERSONAL 133
Obituary 133
ENGINEERING SOCIETIES 133
Coming Technical Meetings 133
CONSTRUCTION NEWS:
Condensed List of Contracts Pending 134
Railways 134
Street and Electric Railways 134
Electric Light and Power 134
Bridges 135
Buildings 135
Water-Works 136
Sewerage 137
Garbage Disposal and Street Cleaning 137
Streets and Roads 138
Manufacturing Plants 138
Gas Plants 138
Miscellaneous Contracts 138
Contract Prices 139
INDUSTRIAL NOTES 140

PERSONAL.

Mr. Percival Golden has been elected a Water Commissioner of Catskill, N. Y.

Mr. T. M. Stout has been appointed Superintendent of the water-works at Shenandoah, Pa.

Mr. W. V. Ingham has been elected City Engineer and Superintendent of Sewers of Scranton, Pa.

Mr. G. C. Langenheim has been appointed City Engineer of Allegheny, Pa., to succeed Mr. Wm. G. Wilkins.

Mr. C. S. Maxwell has been elected City Civil Engineer of Zanesville, O., to succeed Mr. Albert Howell.

Mr. John B. Hawley, Assoc. M. Am. Soc. C. E., was unanimously elected City Engineer of Fort Worth, Tex., April 6.

Mr. Joseph W. Watson has been appointed Auditor of the Atlantic & North Carolina R. R. to succeed Mr. W. K. Styron.

Mr. Wm. H. Breithaupt, M. Am. Soc. C. E., has removed his office from 71 Broadway to 35 Nassau St., New York city.

Mr. George W. McCullough has been elected President of the Rehoboth Light, Heat & Power Co., which will erect a plant at Rehoboth, Del.

Mr. Geo. H. J. Edmondston, Jr., has been appointed Superintendent of the West Virginia Central & Pittsburg Ry., to succeed Mr. E. J. Sigler.

Mr. Rudolph Hering, M. Am. Soc. C. E., has removed his office from 277 Pearl St. to the Woodbridge Building, 100 William St., New York city.

Mr. Archibald S. Downey has been appointed Assistant to the Resident Engineer on the new hydraulic constructions of Cornell University, Ithaca, N. Y.

Mr. F. A. Dunham, civil and consulting engineer, has moved his office from 150 Nassau St. to the St. Paul Building, 220 Broadway, New York city.

Mr. J. H. Cummin, Superintendent of Buildings of the Long Island R. R., has been made Superintendent of Bridges and Buildings, reporting to the Chief Engineer.

Mr. Thomas Fisher has been appointed Receiver of the Roaring Creek & Charleston R. R., with headquarters at Philadelphia, Pa., to succeed Mr. C. T. Dixon, resigned.

Mr. T. S. Goodrich has been appointed Division Superintendent of the Wabash R. R., with headquarters at Moberly, Mo., to succeed Mr. W. A. Garrett, transferred.

Mr. J. H. Barrett, Superintendent of the Fifth Division of the Southern Ry., has been appointed Superintendent of Transportation, with headquarters at Washington, D. C.

Messrs. Arthur W. Dudley, of Brentwood, and Edward J. Dorritty, of Manchester, N. H., have formed a partnership to carry on a civil engineering business in Exeter, N. H.

Mr. Charles Hermany, Engineer of the Louisville Water Co., Louisville, Ky., has been made a member of the commission to examine the plans for the new Cincinnati water supply.

Mr. John S. Blandin has been appointed Superintendent of the Crystal Springs Water Co., Bethlehem, N. H., to succeed Mr. Bert Cram, resigned. Mr. Blandin held the office several years ago.

The Osborn Co., civil engineers, of Cleveland, O., have removed their offices from the Hickox Building to more commodious quarters in the Osborn Building, at the corner of Prospect and Huron Sts.

Mr. W. W. Coe, M. Am. Soc. C. E., M. Am. Inst. M. E., late Chief Engineer of the Norfolk & Western Ry., has accepted an engineering position with the American Surety Co., 100 Broadway, New York city.

Mr. Julian Kennedy, consulting engineer, of Pittsburg, Pa., left for Russia on April 6 on business connected with the building of the iron plant at Mariopol, Russia, of which he is Chief Constructing Engineer.

Messrs. Hill & Enricht, civil engineers, of Grossdale, Ill., have dissolved partnership. Mr. Louis Enricht will continue the business, Mr. Hill having accepted a position as Manager of a new loan and trust company.

Maj. Chas. F. Powell, U. S. A., of Washington, D. C., has succeeded Maj. Richard L. Hoxie, U. S. A., at the U. S. Engineer's office in Pittsburg, Pa., and will have charge of the Monongahela River improvements.

Mr. C. L. Addison has been appointed General Road Master of the Long Island R. R., in addition to his duties as Signal Engineer. He will have full charge of track and roadway work, with headquarters at Long Island City.

Mr. George M. Brill, M. Am. Soc. M. E., for the past 8 years Mechanical Engineer of the Solvay Process Co., Syracuse, N. Y., and recently transferred by that firm to Detroit, Mich., has accepted a similar position with Messrs. Swift & Co., Chicago.

Col. W. F. Morse, of New York city, who was for many years agent of the Engle Sanitary & Cremation Co., of Des Moines, will conduct an independent business for the construction of garbage furnaces and disinfecting plants for cities and public institutions, with offices at 56 Pine St.

Mr. S. G. Hobart, who for several years has been connected with the Engineering Department of the Solvay Process Co., of Syracuse, N. Y., and was recently transferred to their new works at Detroit, Mich., has resigned to accept a position as Superintendent of Construction for the new buildings now being constructed by the Eastman Co., Rochester, N. Y.

Mr. Edward P. North, M. Am. Soc. C. E., Water Purveyor of New York city, has been appointed by the Commissioner of Public Works to be Consulting Engineer of Street Improvements, to succeed Mr. Stephenson Towle, whose resignation was noted in our issue of April 1. The statement in our last issue, made on the strength of a newspaper report, that Mr. North was obliged to undergo a civil service examination for this promotion proves to be incorrect. Those entrusted with the execution of the New York Civil Service law appreciate the fact that whatever the merits of the examination system in filling subordinate positions, it is not practicable to apply it to those at the head of the profession. The difficulty of finding examiners who would be any more competent than the candidates would be a sufficient reason, if no other existed.

OBITUARY.

Mr. John C. Paulsen, architect, of Helena, Mont., died March 31.

Mr. Patrick Dixon, contractor, of Syracuse, N. Y., died April 10, aged 70.

Mr. John Peck, engineer of the water-works at Clarksburg, W. Va., died March 31.

Mr. John William Morrison, Secretary of Public Works for Prince Edward Island, died in Charlottetown, P. E. I., this week, aged 77.

Mr. Thomas Fitzgerald, Supervisor of the Norfolk & Western Ry., between Hagerstown, Md., and Shenandoah, Va., died at the former place, April 10, aged 48.

Mr. Frederick Heron, until about a year ago General Superintendent of the Phoenix Iron Works, Phoenixville, Pa., died in Chicago, Ill., April 6, aged 45. During the last year he had been General Manager of the rail mill of the Illinois Steel Co.

Mr. Charles Crooke, civil engineer, of Brooklyn, N. Y., died April 10, aged 46. From 1873 to 1876 he was connected with the Brooklyn park department and was also the constructing engineer of the Fort Greene Wall, the Ocean Parkway Extension and Concourse.

Dr. Von Stephan, German Imperial Postmaster General, the originator of the Universal Postal Union, died in Berlin April 8, aged 66. He was born in Pomerania and entered the German postal service at the age of 18, continuing in it until his death. In 1856 he was promoted to a place in the general postoffice in Berlin and in 1870 was made General Postal Director of Prussia. He became Imperial Director of Posts and Telegraphs after the establishment of the empire, and it was through his efforts that the telephone was introduced into the German postal system. Many other advances in postal methods were brought about through his efforts, including the pneumatic tube system, as used in Berlin, and some of the improvements in the transatlantic service.

Dr. Edward Drinker Cope, Professor of Zoology and Comparative Anatomy in the School of Biology of the University of Pennsylvania, died in Philadelphia, Pa., April 11, aged 56. He was born in that city and graduated from the above university, afterwards studying in the Philadelphia Academy of Sciences, the Smithsonian Institution and spending two years in study in Europe. He became Professor of Natural Science in Haverford College in 1866 and in 1868 was employed on the Geological Survey of Ohio. In 1870 he made important explorations with the Hayden Geological Survey, conducting an expedition from Fort Bridger, Wyo., to explore the tributaries of the Green River. He explored Northeast Colorado in 1873 and made many important geological and paleontological discoveries. More recently he held the position of Chief Editor of the "American Naturalist" and also found time to devote to various important scientific tasks.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

ENGINEERS' CLUB OF COLUMBUS.
April 17. Secy., M. S. Hopkins, 14½ N. High St., Columbus, O.
ENGINEERS' CLUB OF PHILADELPHIA.
April 17. "The Installation of the Niagara Falls Power Co.," by Chas. F. Scott. Secy., L. F. Rondinella, 1122 Girard St.
ENGINEERS' CLUB OF MINNEAPOLIS.
April 19. Secy., Elbert Nexsen, 1620 S. E. 4th St., Minneapolis, Minn.
TECHNICAL CLUB OF OMAHA.
April 19. Secy., J. Harry Lawrie, Omaha, Neb.
ENGINEERS' SOC. OF WESTERN PENNSYLVANIA.
April 20. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg.
WESTERN RAILWAY CLUB.
April 20. Secy., W. D. Crossman, The Rookery, Chicago.
COLUMBIAN ENGINEERING SOCIETY.
April 20. Secy., F. W. Hart, 15th and H Sts., N. W. Washington, D. C.
ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
April 21. Secy., F. Van Vleck, Los Angeles, Cal.
ASSOCIATION OF ENGINEERS OF VIRGINIA.
April 21. Secy., J. A. Pilcher, Roanoke, Va.
BOSTON SOCIETY OF CIVIL ENGINEERS.
April 21. Secy., S. E. Tinkham, City Hall.
AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
April 21. Secy., R. W. Pope, 26 Cortlandt St., New York city.
WESTERN FOUNDRYMEN'S ASSOCIATION.
April 21. Secy., A. Sorge, Marquette Building, Chicago.
ENGINEERS' CLUB OF ST. LOUIS.
April 21. Secy., Richard McCulloch.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
April 21. Secy., C. W. Hunt, 127 E 23d St., New York city.
CANADIAN SOCIETY OF CIVIL ENGINEERS.
April 22. Secy., C. H. McLeod, 112 Mansfield St., Montreal.
ENGINEERING ASSOCIATION OF THE SOUTH.
April 22. Secy., L. P. Brown, Nashville, Tenn.
CENTRAL RAILWAY CLUB.
Special meeting, April 23. Regular meeting, May 14. Secy., H. D. Vought, Buffalo "Courier," Buffalo, N. Y.
INDIANAPOLIS ENGINEERING CLUB.
April 24. Secy., Edson F. Folsom, Indianapolis, Ind.
WISCONSIN POLYTECHNIC SOCIETY.
April 27. Secy., W. K. Means, Loan and Trust Bldg., Milwaukee, Wis.
CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
May 3. Secy., C. L. Annan, City Engineer's Office.
ENGINEERS' SOCIETY OF WESTERN NEW YORK.
May 3. Secy., Henry Vier, Library Bldg., Buffalo.
WESTERN SOCIETY OF ENGINEERS.
May 5. Secy., N. L. Littleton, Monadnock Block, Chicago.
NATIONAL MUNICIPAL LEAGUE.
May 5, 6 and 7. At Louisville, Ky. Secy., Clinton G. Woodruff, 514 Walnut St., Philadelphia, Pa.
BROOKLYN ENGINEERS' CLUB.
May 6. Secy., A. J. Provost, Jr., 191 Montague St.
TECHNICAL SOCIETY OF THE PACIFIC COAST.
May 7. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.
MONTANA SOCIETY OF ENGINEERS.
May 8. Secy., Albert S. Hovey, Helena.
ENGINEERS' CLUB OF KANSAS CITY.
May 10. Secy., F. W. Tuttle, Baird Bldg.
AMERICAN FOUNDRYMEN'S ASSOCIATION.
May 10 to 14. Annual meeting at Detroit. Secy., John A. Penton, Detroit, Mich.
RAILWAY SIGNALING CLUB.
May 11. Secy., Geo. M. Basford, The Rookery Bldg., Chicago.
DENVER SOCIETY OF CIVIL ENGINEERS.
May 11. Secy., Walter Pearl, 36 Jacobson Bldg.
NORTHWEST RAILWAY CLUB.
May 11. Secy., T. A. Foque, Soo Line, Minneapolis.
CIVIL ENGINEERS' CLUB OF CLEVELAND.
May 11. Secy., F. A. Coburn, Case Library Bldg.
NEW ENGLAND RAILROAD CLUB.
May 12. Secy., Edwd. L. Jones, P. O. Box 1158, Boston.
ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
May 13. Secy., James K. Zollinger, Norton Bldg.
ST. LOUIS RAILWAY CLUB.
May 14. Secy., H. H. Roberts, 511 Commercial Bldg.
SOUTHERN AND SOUTHWESTERN RAILWAY CLUB
May 20. Kimball House, Atlanta, Ga. Secy., F. A. Charpiot, Macon, Ga.
ENGINEERS' CLUB OF CINCINNATI.
May 20. Secy., J. F. Wilson, P. O. Box, 333.
NEW YORK RAILROAD CLUB.
May 20. Secy., W. W. Wheatly, 168 Montague St., Brooklyn.
AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
May 24 to 29, at Hartford, Conn. Secy., F. R Hutton, 12 West 31st St., New York City.
MASTER CAR BUILDER'S ASSOCIATION.
June 8. Annual meeting at Old Point Comfort, Va. Secy., J. W. Cloud, Rookery Bldg., Chicago, Ill.
NORTHWESTERN TRACK AND BRIDGE ASSOC.
June 11. Secy., D. W. Meeker, St. Paul, Minn.

TECHNICAL CLUB OF OMAHA.—This new engineering society was organized at Omaha, Neb., on April 8, by engineers, architects and others interested in engineering work. The following officers were elected: George H. Pegram, M. Am. Soc. C. E., Chief Engineer Union Pacific Ry. system, President; George T. Prince, M. Am. Soc. C. E., Chief Engineer, Omaha Water Co., Vice-President; J. Harry Lawrie, architect, Secretary; Curtiss C. Turner, C. E., Treasurer; Andrew Rosewater, M. Am. Soc. C. E., Director for two years; E. F. Schurig, City Electrician, Director for three years; 35 persons were present and 65 have signified their intension to join the club. Meetings will be held on the third Monday of each month, except July and August, beginning April 19.

AMERICAN FOUNDRYMEN'S ASSOCIATION. — The committee having in charge the arrangements for the entertainment of the American Foundrymen's Association in Detroit, May 10 to 14, have received so much encouraging information concerning the number that would like to be in attendance that they are making preparations to entertain 800 people.

The committee, consisting of W. H. Pfahler, of the Abram Cox Stove Co., Philadelphia, Pa.; Wm. Yagle, of Wm. Yagle & Co., Pittsburg, Pa., and E. H. Putnam, of the Chattanooga Plow Co., Chattanooga, Tenn., appointed to consider the advisability of organizing a Defense Association within the lines, or in connection with the American Foundrymen's Association, met in Detroit April 5 and 6, and after discussing the matter they prepared a report to be submitted to the Convention with recommendations as to the best plan to be adopted.

The committee were unanimously of the opinion that it would be an inestimable blessing whose effect would be far-reaching, and that should it receive the attention of the delegates, it would be of greater importance to the foundry business and possess greater possibilities for good than anything else that could be suggested at this time.

The report which they will submit will deal with the matter in detail in all its phases. It is expected that the discussion which will arise upon the consideration of this report will be very entertaining and the result will be watched with much interest by the foundry trade of America.

Mr. Pfahler has had many years' experience in matters of this kind as a member of the Stove Founders' Defense Association, and his explanation of the workings of that Society and the good accomplished had much to do with the committee's decision. John A. Penton, Secy.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Apr. 15.	Jail,	Griffin, Ga.	Mar. 11
Apr. 15.	School building,	Sitka, Alaska	Feb. 11
Apr. 15.	Jetty,	Sabine Pass, Tex.	Feb. 18
	Advertised, Eng. News, Feb. 18 to Mar. 11.		
Apr. 15.	Pipe sewer, etc.,	Moores, Pa.	Mar. 18
	Advertised, Eng. News, Mar. 18 and 25.		
Apr. 15.	Brick paving,	Olean, N. Y.	Mar. 18
	Advertised, Eng. News, Mar. 18, 25, April 1.		
Apr. 15.	Furnishing sewer material,	Baltimore, Md.	Mar. 4
Apr. 15.	Brick paving,	Shreveport, La.	Mar. 25
Apr. 15.	Brick paving,	Albany, N. Y.	Mar. 25
Apr. 15.	Water tower, pump, etc.,	Massillon, O.	Mar. 25
Apr. 15.	Grading, paving, etc.,	Butler, Pa.	Apr. 1
Apr. 15.	Bonds ($25,000),	Berkeley, Va.	Apr. 1
Apr. 15.	Canal bridge,	Jersey City, N. J.	Apr. 1
Apr. 15.	Sidewalks (40,000 sq. fr.),	Galt, Ont.	Apr. 8
Apr. 15.	Brick paving,	Franklin, Pa.	Apr. 8
Apr. 15.	Asphalt paving,	New York, N. Y.	Apr. 8
Apr. 15.	Asphalt paving, etc.,	Brooklyn, N. Y.	Apr. 8
Apr. 15.	Valves, etc.,	Atlanta, Ga.	Apr. 8
	Advertised, Engineering News. Apr. 8.		
Apr. 15.	Water tunnel,	Buffalo, N. Y.	Apr. 8
Apr. 15.	Street bonds,	Jamaica, N. J.	Apr. 8
Apr. 15.	Pipe sewers,	Franklin, Pa.	Apr. 8
Apr. 15.	School building,	Forest City, Ia.	Apr. 8
Apr. 15.	Brick and pipe sewers,	Cedar Rapids, Ia.	Apr. 8
Apr. 15.	Court house,	Coquille City, Ore.	Apr. 8
Apr. 15.	Hospital,	New York, N. Y.	Apr. 8
Apr. 16.	Brick paving, etc.,	Cleveland, O.	Apr. 8
Apr. 16.	Pipe sewer,	Omaha, Neb.	Apr. 8
Apr. 16.	Altering steam dumper,	New York, N. Y.	Apr. 8
Apr. 16.	Masonry walls,	Indianapolis, Ind.	Apr. 8
Apr. 16.	Cleaning sewers,	Brooklyn, N. Y.	Apr. 8
Apr. 16.	Dredging in Charlotte Harbor,	N. Y.	Mar. 25
	Advertised, Eng. News, Mar. 25 to Apr. 15.		
Apr. 16.	School building,	Canton, O.	Mar. 25
Apr. 16.	Grading, brick paving, etc.,	Cleveland, O.	Mar. 25
Apr. 16.	Cast-iron water main,	Duluth, Minn.	Apr. 1
	Advertised, Engineering News, Apr. 1.		
Apr. 16.	Surf boats (12),	Washington, D. C.	Apr. 1
Apr. 16.	Water pipe,	Holyoke, Mass.	Apr. 15
Apr. 16.	Sewer system,	Winona, Minn.	Apr. 15
Apr. 17.	Macadamizing,	Harrisville, R. I.	Apr. 15
Apr. 17.	Canal work,	Ottawa, Ont.	Apr. 1
Apr. 17.	Post office,	Fort Monroe, Va.	Apr. 1
Apr. 17.	Electric power plant,	Monterey, Cal.	Mar. 25
Apr. 17.	Addition to forage house,	Burlington, Vt.	Apr. 1
Apr. 17.	Macadamizing, etc.,	Roslyn, N. Y.	Apr. 8
Apr. 17.	Steel chimney,	Erie, Pa.	Apr. 8
	Advertised, Eng. News, Apr. 8 and 15.		
Apr. 19.	Sewer construction,	Jamaica, L. I.	Apr. 8
	Advertised, Engineering News, Apr. 1.		
Apr. 19.	Mortars, etc.,	Washington, D. C.	Mar. 25
Apr. 19.	Steel bridge,	Springfield, Mass.	Mar. 25
Apr. 19.	Electric light plant,	Forty Fort, Pa.	Apr. 1
Apr. 19.	Dredging,	Lynn, Mass.	Apr. 1
	Advertised, Eng. News, Apr. 1 to 15.		
Apr. 19.	Court house,	Gatesville, Tex.	Apr. 15
Apr. 19.	Garbage crematory,	Ellis Island, N. Y. H.	Apr. 15
Apr. 19.	Sewer,	St. Paul, Minn.	Apr. 15
Apr. 19.	Steel bridge,	Berwick, Ill.	Apr. 15
Apr. 20.	Water-works,	Medina, O.	Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
Apr. 20.	Heaters for schools,	Philadelphia, Pa.	Apr. 15
Apr. 20.	School annex,	Mount Morris, N. Y.	Apr. 15
Apr. 20.	Reservoir,	Jacksonville, Fla.	Apr. 15
Apr. 20.	Flagging sidewalks,	Brooklyn, N. Y.	Apr. 15
Apr. 20.	Stone abutments,	Toronto, Ont.	Apr. 15
Apr. 20.	School building,	Jackson, Tenn.	Apr. 15
Apr. 20.	Pipe sewer,	Clinton, Ia.	Apr. 15
Apr. 20.	Canal bonds,	Albany, N. Y.	Apr. 1
Apr. 20.	Hospital building,	Wilmington, N. C.	Apr. 1
Apr. 20.	Bridge work,	Providence, R. I.	Apr. 1
	Advertised, Eng. News, Apr. 1 to 15.		
Apr. 20.	Sewers,	Red Bank, N. J.	Apr. 1
	Advertised, Eng. News, Apr. 8 and 15.		
Apr. 20.	Heating,	Wilmington, N. C.	Apr. 1
Apr. 20.	Sewer bonds,	Cleveland, O.	Mar. 25
Apr. 20.	Plans for school bldgs (4),	Syracuse, N. Y.	Apr. 8
Apr. 21.	Filling (10,000 cu.yds.),	Tompkinsville, N.Y.	Apr. 8
	Advertised, Eng. News, Apr. 8 and 15.		
Apr. 21.	Supplies, etc.,	Philadelphia, Pa.	Mar. 25
Apr. 21.	Electric light plant,	Des Moines, Ia.	Apr. 1
	Advertised, Eng. News, Apr. 1 to 15.		
Apr. 21.	Asphalt paving,	Buffalo, N. Y.	Apr. 15
Apr. 21.	Macadamizing,	Camden, N. J.	Apr. 15
	Advertised, Engineering News Apr. 15.		
Apr. 22.	Street signs,	Brooklyn, N. Y.	Apr. 15
Apr. 22.	Hospital buildings,	Ward's Island, N. Y. H.	Apr. 15
Apr. 22.	Jail, etc.,	Brookings, S. Dak.	Apr. 15
Apr. 22.	Htg and ventilating hospl,	Townsend, Wash.	Apr. 1
Apr. 22.	Repairing pier at St. Josephs,	Mich.	Mar. 25
	Advertised, Eng. News, Mar. 25 to Apr. 15.		
Apr. 22.	Bridge,	Brooklyn, N. Y.	Apr. 8
	Advertised, Eng. News, Apr. 8 and 15.		
Apr. 23.	School building,	Logan, Utah	Apr. 8
Apr. 23.	Brick and pipe sewer,	Wilkes Barre, Pa.	Apr. 1
	Advertised, Eng. News, Apr. 1 and 8.		
Apr. 23.	College building,	Athens, Ga.	Apr. 15
Apr. 23.	Asphalt paving,	New York, N. Y.	Apr. 15
Apr. 23.	Bonds,	Galveston, Tex.	Apr. 15
Apr. 24.	Sewers (Section 50),	Boston, Mass.	Apr. 15
Apr. 24.	Stone crusher, etc.,	Portland, Me.	Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
Apr. 24.	Removing wrecks (7),	St. Augustine, Fla.	Mar. 25
	Advertised, Eng. News, Mar. 25 to Apr. 15.		
Apr. 24.	Grading, curbing, etc.,	Charlotte, N. C.	Apr. 8
Apr. 24.	Court house,	Knox, Ind.	Apr. 8
Apr. 25.	Garbage disposal,	Syracuse, N. Y.	Apr. 8
Apr. 25.	Masonry work,	Tuskaloosa, Ala.	Apr. 15
Apr. 26.	Water-works bonds,	Aberdeen, Md.	Apr. 15
Apr. 26.	Brick and pipe sewer,	Toledo, O.	Apr. 15
Apr. 26.	Improving driveway,	Boston, Mass.	Apr. 15
Apr. 26.	Pocket dump,	New York, N. Y.	Apr. 15
Apr. 26.	Asphalt paving,	New York, N. Y.	Apr. 15
Apr. 26.	School building,	Cairo, Ill.	Apr. 8
Apr. 26.	Sewer,	Wabash, Ind.	Apr. 8
Apr. 26.	Brick paving (44,000 sq.yds.),	Marietta, O.	Apr. 1
Apr. 27.	Locks and dams in Monongahela River,	Pa.	Mar. 25
	Advertised, Eng. News, Mar. 25 to Apr. 15.		
Apr. 27.	Lock and dams in Allegheny River,	Pa.	Mar. 25
	Advertised, Eng. News, Mar. 25 to Apr. 15.		
Apr. 27.	Smokeless powder,	Philadelphia, Pa.	Apr. 1
Apr. 27.	Pier extension,	South Haven, Mich.	Apr. 1
	Advertised, Eng. News, Apr. 1 to 22.		
Apr. 27.	U. S. building work,	Richmond, Ky.	Apr. 15
Apr. 27.	Water mains,	Kearney, N. J.	Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
Apr. 27.	Water-works,	Benson, Minn.	Apr. 15
Apr. 28.	Steel bridge spans,	Boston, Mass.	Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
Apr. 28.	Paving,	Buffalo, N. Y.	Apr. 15
Apr. 28.	Water main (7,500 ft.),	Jefferson Brks, Mo.	Apr. 1
Apr. 28.	Water bonds,	Gallup, N. Mex.	Apr. 8
Apr. 29.	Steel projectiles,	Washington, D. C.	Apr. 8
Apr. 29.	Dredging, etc.,	Oswego, N. Y.	Apr. 1
	Advertised, Eng. News, Apr. 1 to 22.		
Apr. 29.	Rock excavation, etc.,	Oswego, N. Y.	Apr. 1
	Advertised, Eng. News, Apr. 1 to 22.		
Apr. 29.	Dredging,	Portland, Me.	Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
Apr. 29.	Bath house work,	Fort Douglas, Utah	Apr. 15
Apr. 29.	Brick paving,	Easton, Pa.	Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
Apr. 29.	School building,	Waterloo, Ia.	Apr. 15
Apr. 30.	Water supply,	Hoboken, N. J.	Apr. 15
	Advertised, Eng. News, Apr. 15 to 29.		
Apr. 30.	Bridge pier,	Washington, D. C.	Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
Apr. 30.	Jail, etc.,	Hillsboro, N. Dak.	Feb. 25
Apr. 30.	Repairing steamer,	Boston, Mass.	Apr. 8
Apr. 30.	Pipe sewer,	Albert Lea, Minn.	Apr. 8
May 1.	Iron and steel,	Cincinnati, O.	Apr. 1
	Advertised, Eng. News, Apr. 1 to 15.		
May 1.	Removing wreck in New York Harbor		Apr. 15
	Advertised, Eng. News, Apr. 15 to 29.		
May 2.	Court house,	Eastland, Tex.	Apr. 15
May 3.	Bonds ($75,000),	Jacksonville, Fla.	Apr. 1
May 3.	Brick paving,	Marietta, O.	Apr. 8
May 3.	Pumping engine,	St. Paul, Minn.	Apr. 8
	Advertised, Eng. News, Apr. 8 to 29.		
May 3.	Court house work,	Clinton, Ia.	Apr. 15
May 3.	Paving, etc.,	Albany, N. Y.	Apr. 15
May 3.	Brick paving (18,000 sq. yds.),	Bradford, Pa.	Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
May 3.	School building,	Alexandria, Minn.	Apr. 15
May 3.	Paving,	Elmira, N. Y.	Apr. 15
	Advertised, Engineering News, Apr. 15.		
May 5.	Sewer construction,	Warren, Pa.	Mar. 25
	Advertised, Engineering News, March 25.		
May 5.	Steel bridges (4),	Natchez, Miss.	Apr. 15
May 6.	Wire, rivets, nuts, etc.,	Washington, D. C.	Apr. 15
May 6.	Bridge,	Wenatchee, Wash.	Apr. 15
May 6.	Dredging (50,000 cu. yds.),	Wis.	Apr. 8
	Advertised, Eng. News, Apr. 8 to 29.		
May 7.	Sewer supplies,	Pawtucket, R. I.	Apr. 15
May 7.	Brick and chert paving,	Meridian, Miss.	Apr. 15
	Advertised, Eng. News, Apr. 15, 22 and 29.		
May 10.	Mantels,	Fort Hancock, N. J.	Apr. 15
	Advertised, Eng. News, Apr. 15 and 22.		
May 10.	Court house,	Galveston, Tex.	Apr. 15
May 15.	Court house, etc.,	Fort Wayne, Ind.	Apr. 8
	Advertised, Eng. News, Apr. 8 to 29.		
May 15.	Railway ties for 5 years,	St. Louis, Mo.	Apr. 15
May 19.	Dredging (600,000 cu. yds.),	Chicago, Ill.	Apr. 8
	Advertised, Eng. News, Apr. 8 to 29.		
June 1.	Drainage canals, etc.,	New Orleans, La.	Mar. 25
	Advertised, Eng. News, Mar. 25 to Apr. 29.		
June 1.	Pumping stations, etc.,	New Orleans, La.	Mar. 25
	Advertised, Eng. News, Mar. 25 to Apr. 29.		
June 3.	Canal work (8 miles),	Chicago, Ill.	Apr. 15
	Advertised, Eng. News, Apr. 15 to May 6.		

RAILWAYS.

BANGOR & AROOSTOOK.—A press report states that surveys are being made for an 11-mile extension of this road from Caribou, Me., to Limestone, and that a 150-ft. steel bridge will be constructed over the Madawaska River. Pres., A. A. Burleigh; Ch. Engr., M. Burpee, Houlton, Me.

CHARLESTON & WESTERN CAROLINA.—This company, which is the consolidation of two roads, and which recently came into the possession of Messrs. Thomas and Ryan, will, it is said, make many valuable improvements to its property, involving an outlay of about $600,000. Several hundred passenger and freight cars, a number of new locomotives, and heavy new steel rails for 50 miles of track, together with the erection of several new stations and improved terminal facilities at Augusta, Ga., are among the improvements contemplated. Some of the contracts and orders have already been given out.

MOBILE & OHIO.—Birmingham, Ala., papers state that the Hanover Construction Co. has awarded the contracts for grading, trestling, piling and ties for the extension of this railway, as advertised in Eng. News, as follows: Grading, to C. B. Wilkins & Co., New York, 18 miles; Peter Cassady, Little Rock, Ark., 10 miles; Abercrombie & Williams, Montgomery, Ala., 5 miles; George W. Calahan & Co., Knoxville, Tenn., 10 miles; R. M. Quigley & Co., St. Louis, 20 miles; T. F. Ryan, Kansas City, 5 miles; Mason, Hoge & Co., Chicago, 12 miles; Shea & Co., Knoxville, 8 miles; Perrin & Co., Birmingham, 9¾ miles. Trestling, piling and ties, from Columbus, Miss., to Tuskaloosa, Ala., 65 miles, to Gianini & Co., Pittsburg, Pa. Trestling and piling, from Tuskaloosa to Montgomery and on the Blocton branch, to R. M. Quigley & Co., St. Louis.

NORWICH & WORCESTER.—Surveys are now being made, according to reports, for an extension of this road from Allyn's Point to Groton, Conn. Pres., A. G. Bullock, Boston, Mass.

PECOS VALLEY.—The Pecos Valley Construction & Land Co. has been incorporated to extend the Pecos Valley road from Roswell, N. Mex., 225 miles northward to the Texas Panhandle, and connect with the Santa Fe and the Rock Island roads. Pres., J. J. Hagerman, Colorado Springs, Colo.

PICKENS COUNTY.—A company, including among its members ex-Governor John Gary Evans and Julius E. Boggs, of Pickens, S. C., has been formed to build at once a new railway from Pickens Court House, S. C., to Easley, a station on the Atlanta & Charlotte Air Line division of the Southern Ry. main line from Washington to Atlanta. The new road will be 10 miles long at first, but may be extended later. The principal object is to establish railway communication between Pickens Court House and the main line of travel north and south.

ST. LOUIS, CHICAGO & ST. PAUL.—This railway was sold April 3 for $650,000 to Thomas Carmichael, London, Eng., representing foreign bondholders. It is said that the road will be improved, extended and consolidated with the Chicago, Peoria & St. Louis Ry., of which F. W. Huidekoper, New York city, is president.

STREET AND ELECTRIC RAILWAYS.

EXETER, N. H.—A Boston syndicate has secured control of the Exeter & Hampton Beach Electric Ry. It is stated that work will be begun at once. Pres., Eben Folsom. John D. Gilman is also interested.

ARLINGTON, MASS.—Chas. F. Woodward, Pres., Wakefield, Mass., writes us that the capital has been secured for constructing the Arlington & Winchester St. Ry., 3½ miles long, to connect the West End system at Arlington with the Wakefield & Stoneham St. Ry. at Winchester. The road will be built this season.

SPRINGFIELD, MASS.—The Springfield St. Ry. Co. is considering the question of relaying a portion of its road with a heavier rail. Pres., J. Olmsted, Main St.

PROVIDENCE, R. I.—The Providence & Taunton St. Ry. Co. is reported to be securing franchises for its road. Capt. Josiah A. King, Providence, and E. P. Shaw, Jr., Newburyport, Mass., are interested.

WOONSOCKET, R. I.—The Woonsocket St. Ry. Co. has voted to extend its electric road to Statesville, a distance of four miles. Pres., E. K. Ray; Secy., Willard Kent.

AUBURN, N. Y.—The Auburn City Ry. Co. has started work on the Moravia St. Line to Owasco Lake Park, from Swift St., Auburn, and expects to have the line running about the middle of May. Geo. D. Grannis, Syracuse, is the contractor. Engr., Thos. H. Mather, 36 Nottingham Bldg., Auburn.

BAYSIDE (L. I.), N. Y.—The New York & North Shore Ry. Co. has been granted a franchise for its proposed electric railway in this place. Eugene L. Bushe is interested.

LYONS, N. Y.—J. O. Bashford, Lyons, writes us that surveys have been made and the right-of-way consents obtained for the Lyons & Sodus Bay Electric Ry., 15 miles long, from Lyons to South Sodus, Alton and Sodus Point. The company had not been organized up to April 4, but probably would be during the week. The company wishes to arrange with some company at once for constructing the road.

MAYVILLE, N. Y.—Wm. Minton, of Westfield, N. Y., is reported as interested in a proposed electric railway from Barcalona to Mayville, by way of Westfield.

NEW YORK, N. Y.—C. H. T. Collis, Comr. Dept. Pub. Wks., has granted the Metropolitan St. Ry. Co. permission to change the motive power of its Eighth Ave. line to the underground electric system.

PENFIELD, N. Y.—The Rochester Ry. Co. is reported as contemplating extending its electric road to this place. Secy., Fred. P. Allen.

ASBURY PARK, N. J.—It is stated that the Atlantic Coast Electric Ry. Co., which is controlled by the Crimmins syndicate, of New York, is endeavoring to extend its trolley road from Asbury Park to Belmar, where it will connect with the projected road from Belmar to Point Pleasant, and make a continuous line from the latter resort to Pleasure Bay, a suburb of Long Branch.

LONG BRANCH, N. J.—The Long Branch Electric Ry. Co. has been incorporated with a capital stock of $150,000; incorporators, Bernard Mahon, Branchport, N. J.; Frank P. Killeen, Jacob Lorsch, New York; James J. McInerney, Brooklyn, N. Y.; C. Ewing Patterson, Harry W. Green and Charles Morris, Long Branch.

COLUMBIA, PA.—Wm. B. Given, Receiver for the Pennsylvania Traction Co., has asked the court to grant him permission to extend and improve the electric road at a cost of about $50,000.

PHILADELPHIA, PA.—Local papers state that the Union Traction Co. has let the contract for rebuilding its burned power house at 13th and Mount Vernon Sts. to Allen B. Rorke, Philadelphia, at about $39,000. Electrical machinery with 8,000 HP. capacity will be installed.

DOUGLASVILLE, GA.—The Atlanta & Douglasville Ry. Co. has been organized to build an electric railway 25 miles long; capital stock, $375,000. Chas. G. Wetter, Engr., and Pres. Builders' Exchange, Philadelphia, Pa., and L. Galloway, of Decatur, Ga., are interested.

LOUISVILLE, KY.—The Metropolitan Ry. Co. has been incorporated to build an electric railway about 150 miles long; capital stock, $1,000,000. Geo. H. Harris, Washington, D. C.; Robt. M. Kilgore, J. W. Woolfolk, Hanover Construction Co., 15 Wall St., New York, N. Y., and Hugh R. Garden, Louisville, are said to be interested.

MOUNT VERNON, O.—The Central Ohio Electric Ry. Co. is reported as selling its bonds for the construction of its road to be 46 miles long; capital stock, $200,000. Pres. and Gen. Mgr., F. W. Jones, Mount Vernon.

CHICAGO, ILL.—The General Electric Ry. Co., it is reported, will soon begin the construction of its conduit railway, estimated to cost about $6,000,000. A. G. Wheeler, of the Love Traction Co., can give information.—The North Shore Inter-Urban Ry. Co. is said to have been incorporated to construct an electric railway to connect Waukegan and Highland Park with this city; capital stock, $340,000. This line will eventually reach Milwaukee.

BURLINGTON, IA.—At public auction April 10 the property of the Burlington Electric St. Ry. Co. was sold to a Boston syndicate for $50,000. The lines will be improved this season by the expenditure of $100,000.

BUTTE, MONT.—J. R. Wharton, Mgr. Butte Consolidated Ry. Co., writes us that about a mile of the electric road will be built this year. Pres., W. A. Clark, Butte.

ST. LOUIS, MO.—The Wellston, Creve Coeur & St. Charles Ry. Co. has asked for a franchise to St. Charles from the city limits. W. F. Broadhead, Clayton, Mo., and J. P. Ellis, of St. Louis, are interested.

ALMA, COLO.—The construction of an electric railway from Breckinridge to Alma is reported as projected by Melville E. Stone, Chicago Ill.; M. M. Howe, Breckinridge, Colo., and J. N. Boon, Syracuse, N. Y.

SAN BERNARDINO, CAL.—Col. G. G. Green, Pasadena, Cal., writes us that a company has not yet been organized to build the proposed electric road from this place to Arrowhead Springs. Considerable money has been secured, but more capital is wanted.

ELECTRIC LIGHT AND POWER.

RUTLAND, VT.—Surveys and estimates have been completed by Chappell & Smith, of this city, for a proposed electric power plant, delivering about 1,600 HP. and operated by water power under 480 ft. head, through about two miles of 48-in. pipe. The power to be transmitted by wire eight miles to the city. It is proposed to raise the necessary capital by organizing a stock company.

BATH, N. Y.—Reports state that the electric light company has leased the grist mill and water property of L. D. Dodgman. The company, it is said, proposes to con-

struct a new brick or stone power house to utilize the water power instead of steam, as at present, and to furnish power as well as light.

BROOKLYN, N. Y.—The Edison Co. will, it is said, soon begin work on the erection of a one-story brick power house, 118 x 200 ft., on the south side of 66th St., to cost about $75,000.

COLLEGE POINT (L. I.), N. Y.—The Flushing Electric Light & Power Co. has, it is said, been granted permission to erect poles and string wires in this town and promises to introduce the light within 60 days.

ELMWOOD, N. Y.—Reports state that this town will grant an electric light franchise and that estimates are being made for a plant.

LANCASTER, N. Y.—Press reports state that two petitions for electric light franchises have been received by the council. Edgar K. Newton, Village Pres.

LOCKPORT, N. Y.—Press reports state that the assembly has passed the bill authorizing this city to spend $50,000 for an electric light plant. C. H. Cornes, Cy. Engr.

MOUNT MORRIS, N. Y.—The bill authorizing this town to construct a dam across the Genesee River at a cost of about $30,000 is said to have passed the assembly.

WELLSVILLE, N. Y.—This town will be lighted by electricity, according to reports.

HOBOKEN, N. J.—The Hudson Electric Light Co. has been granted permission to lay and maintain underground conduits, cables, wires and manholes in this city to be used for furnishing electric current for light and power purposes.

BELLEFONTE, PA.—The Edison Electric Light Co.'s plant at this place was completely destroyed by fire April 6; loss, $35,000; insurance, $13,000.

WINSTON, N. C.—The Fries Mfg. & Power Co. was organized here April 5 with a capital stock of $60,000. The principal purpose of the company is to establish an electric plant on the Yadkin River, 15 miles from here, to supply Winston and Salem with electric power, as noted in our issue of Feb. 25. Pres., H. W. Fries; Vice-Pres., C. H. Fogle; Secy. and Treas., J. W. Fries.

BENNETTSVILLE, S. C.—Reports state that this town will soon install an electric light system.

FORT VALLEY, GA.—This town is to have electric lights within the next sixty days, according to reports. Arrangements are now being made to have the plant built at once.

ROME, GA.—The Rome Electric Light Co.'s plant, at this place, was sold April 6 to J. L. Bass, J. E. Dean and S. S. King as trustees for the bondholders for $5,000 to satisfy a mortgage held by the American Surety Co., as noted in our issue of March 18.

WEST POINT, GA.—Reports state that the present electric plant with a capacity of 500 lights will be sold and another plant erected having a capacity of 2,000 lights.

OPELOUSAS, LA.—The contract for constructing an electric light plant and water-works is said to have been awarded to B. F. Rounds, Galveston, Tex., at $29,700. The contract calls for 40 2,000 c. p. arc lights, and water mains in the principal portions of the town. Bonds bearing 6% interest will be issued for the work.

MEMPHIS, TENN.—Reports state that the question of installing an electric light plant in the jail has been postponed to the July term of court.

CAREY, O.—This town and Nevada, O., are reported to be considering the construction of electric light plants.

LEBANON, O.—M. E. Gustin, Mayor, informs us that the proposition to issue bonds for an electric light plant was defeated by 8 votes at the municipal election April 5.

EDINBURG, IND.—Reports state that the council will order plans and specifications prepared for a $5,000 electric light plant to be operated in connection with the present water-works.

CONSTANTINE, MICH.—Bids are asked, according to reports, for lighting the streets with electricity for 5 or 10 years.

MARQUETTE, MICH.—L. C. Palmer, Secy. Electric Light & Power Comn., writes us that the following improvements are contemplated: Repairing dam, putting in new machinery and building about 2,722 ft. of 6-ft. penstock at an estimated cost of $35,331.

UPPER ALTON, ILL.—This town will soon vote on the question of constructing an electric light plant and water-works, at an estimated cost of about $55,000.

APPLETON, WIS.—It is reported that the Citizens' Electric Light Co. has sold its property to the Appleton Electric Light & Power Co. for $25,000.

ALGONA, IA.—Reports state that a stock company will be organized to install an electric light plant to cost about $5,000.

ROCK RAPIDS, IA.—The contract for building an electric lighting plant at this place was awarded April 4 to the Bigelow Electrical Supply Co., Lincoln, Neb., at $13,700, the plant to be completed by July 10, 1897. The three wire system will be used and the plant run with a 150 HP. Corliss engine.

ST. LOUIS, MO.—No bids were received April 9 for lighting the streets with electricity for 20 years, as advertised since December in Engineering News and other leading journals. The work may be readvertised. E. S. Foster, Secy. Bd. Pub. Improvements.

SILOAM SPRINGS, ARK.—W. H. Daney, Secy. Bd. Improvements, informs us that this town will construct a system of water-works and an electric light plant. The contract will probably be let in about 60 days. J. W. Walker, Des. Engr., Coffeyville.

DEXTER, COLO.—F. J. Hill, Cy. Clk., informs us that the contract for constructing the proposed electric light plant has been awarded to G. Jaeger, Rich Hill, Mo., at $6,550.

GREELEY, COLO.—The Greeley Electric Light Co.'s plant will be sold May 10 to satisfy a $10,000 mortgage held by the Warren Currier estate, according to reports.

ASTORIA, ORE.—Final arrangements for the installing of a series arc-lighting plant under municipal ownership, provision for which was made in the design of the new water-works completed last year, have been made, and bids will shortly be invited on the work and materials. Arthur L. Adams, 401 California St., San Francisco, is in charge of the work.

SACRAMENTO, CAL.—M. J. Desmond, Cy. Clk., writes us that the mayor has been empowered to engage an engineer to prepare plans for the proposed electric light plant.

SAN FRANCISCO, CAL.—Our correspondent informs us that the park commissioners have decided to construct an electric light plant for Golden Gate Park, at an estimated cost of about $40,000.

BRIDGES.

EXETER, N. H.—Press reports state that the Boston Bridge Co. has been awarded the contract for building a new bridge to replace Great Bridge, between Water and Hight Sts., at $3,100. The contract calls for a half deck steel girder bridge, with a 32-ft. roadway and two 6½-ft. sidewalks. Arthur W. Dudley, Cy. Engr.

BOSTON, MASS.—Bids are asked by the Boston Transit Commission, 20 Beacon St., until April 28, for building eight spans of steel superstructure for Charlestown bridge, as stated in our advertising columns. B. Leighton Beal, Secy. Comn.

HARTFORD, CONN.—A new bridge at Broad St. is contemplated, according to reports. C. H. Bunce, Cy. Engr.

HARTFORD, CONN.—Reports state that there is considerable talk of constructing a bridge over the Connecticut River at State St. C. H. Bunce, Cy. Engr.

NIAGARA FALLS, N. Y.—Reports state that the board of public works has approved the plans for bridges at Walnut and Ferry Aves., and instructed the city engineer to advertise for bids. W. W. Read, Cy. Engr.

PORT DICKINSON, N. Y.—Reports state that the site for the proposed bridge at this place was to have been decided April 14.

ROCHESTER, N. Y.—Governor Black has signed Senator Parson's bill appropriating $32,000 for erecting a bridge over the Erie Canal at Monroe Ave.

ELK CREEK, PA.—The Pennsylvania R. R. will build, according to reports, an iron viaduct 60 ft. high and 1,000 ft. long near this place at an estimated cost of about $60,000. A three-track arch bridge, 240 ft. long, will also be built over the Juniata River near Spruce Creek. J. T. Richards, Engr. Maintenance of Way.

WYOMING, PA.—Press reports state that plans are being prepared for an 810-ft. steel bridge over the Susquehanna River between this place and Port Griffiths. N. R. Butler is engineer and W. R. Chapin and A. L. Lindsay are said to be interested.

WASHINGTON, D. C.—Bids are asked until April 30 for reconstructing pier No. 4 of the aqueduct bridge across the Potomac River at Georgetown, as stated in our advertising columns. Chas. J. Allen, Lieut.-Col. Engrs., 601 18th St., N. W.

WHEELING, W. VA.—Press reports state that the Market St. bridge will be repaired at an estimated cost of about $4,000. A. L. White, Cy. Engr.

BERWICK, ILL.—Bids are asked until April 19 for constructing a 50-ft. steel bridge with a 14-ft. roadway. C. B. Bristol, Town Clk.

TUSKALOOSA, ALA.—Bids are asked by the Hanover Construction Co. until April 25 for all masonry and foundation work for five bridges and other masonry work in connection with the extension of the Mobile & Ohio Ry.

NATCHEZ, MISS.—The county board of supervisors is said to have advertised for bids, to be opened May 5, for constructing four steel bridges.

WEST MONROE, LA.—A bridge over the Ouachita River at this place is being considered, according to reports. Mayor Tippitt may be addressed.

JONESBORO, TENN.—The county court has decided to build a bridge across the Chucky River at Deadrick, according to reports.

HAMILTON, O.—The following bids were received April 8 for constructing a bridge over the hydraulic at Black & Clowson's: Toledo Bridge Co., $1,250 to $1,750; Bellefontaine Bridge Co., $1,805 and $1,843; Lafayette Bridge Co., $1,850 to $1,940; Wrought Iron Bridge Co., $1,805 and $1,779; Cincinnati Bridge Co., $1,895 to $1,900; Massillon Bridge Co., $1,810; Oregonia Bridge Co., $1,545; Brackett Bridge Co., $1,800 to $1,850; Hamilton Construction & Tool Co., $1,350 and $1,249.

YOUNGSTOWN, O.—David M. Wise, County Engr., informs us that the following bids were received March 29 for constructing the superstructure of the bridge over the Mahoning River at Spring Common, as noted in our issue of Feb. 25; bids being made on wood and paved floor; bids for substructure are given under Contract Prices:

Kings Bridge Co., Cleveland	$26,400 and	$32,900
J. G. Wagner & Co., Milwaukee, Wis		26,400
Toledo Bridge Co., Toledo, O	$24,850	31,800
Variety Iron Works, Cleveland, O	$33,000	26,000
Pittsburgh Bridge Co., Pittsburg, Pa	$31,900	25,100
Edge Moore Bridge Wks., Wilmington, Del	$25,108	31,872
Oregonia Bridge Co., Oregonia, O		33,800
Lafayette Bridge Co., Lafayette, Ind		32,600
Berlin Iron Bridge Co., East Berlin, Conn	$25,110	31,810
Wrought Iron Bridge Co., Canton, O	$31,885	25,875
Groton Bridge Mfg. Co., Groton, N. Y	$27,000	32,700
Horseheads Bridge Co., Horseheads, N. Y		32,900
Youngstown (O.) Bridge Co., (7 plans)	$16,656 to	34,816
Penn Bridge Co., Beaver Falls, Pa	$31,960	26,400
Frank R. Long, New York	$26,000	33,000
Brackett Bridge Co., Cincinnati, O		32,500

CHICAGO, ILL.—A petition will be presented to the council for a bridge over the canal at Robey St., according to reports.

ROCHELLE, ILL.—Orrin A. Wilson, Clinton, Ia., informs us that the following bids were received April 1 for constructing the superstructure of a 33, 53, 73 and two 63-ft. iron bridges in Reynolds Township:

Wrought Iron Bridge Co., Canton, O	$2,700
Massillon Bridge Co., Massillon, O	2,300
Penn Bridge Co., Beaver Falls, Pa	2,500
Youngstown Bridge Co., Youngstown, O	2,617
Wisconsin Bridge Co., Milwaukee, Wis	2,195
Lafayette Bridge Co., Lafayette, Ind	2,850
M. M. Billmire, Ashton, Ill. (accepted)	2,857
Joliet Bridge Co., Joliet, Ill	2,522
Chicago Bridge Co., Washington Heights, Ill	2,994
Elizabeth Bridge Co., Elizabeth, Ill	1,840
Milwaukee Bridge Co., Milwaukee, Wis	2,067
Clinton Bridge & Iron Works, Clinton Ia.	$2,150 to 2,339

URBANA, ILL.—Ira O. Baker, Consult. Engr., Champaign, Ill., informs us that the following bids were received April 8 and 9 for constructing bridges at Raymond, Sadorus and Bement:

	Raymond.	Sadorus.	Bement.
Massillon Bridge Co., Massillon, O	—	—	$1,478
Indiana Bridge Co., Muncie, Ind	$990	$1,270	1,457
Joliet Bridge Co., Joliet, Ill	*847	1,295	1,439
La Fayette Br. Co., La Fayette, Ind.	868	1,268	1,468
Milwaukee Br. Co., Milwaukee, Wis.	868	1,240	1,467
[1]Carmichael & Andrews	940	1,220	*1,297
St. Louis Bridge Co., St. Louis, Mo.	900	1,300	1,505
J. D. Adams, Indianapolis, Ind	—	—	1,475
Stupp Bros. Br. & Iron Co., St. Louis.	—	—	1,460
R. H. Phillips, St. Louis	—	—	1,525
Wisconsin Br. Co., Milwaukee, Wis.	879	*1,197	1,426
Canton Bridge Co., Canton, O	841	1,243	—
King Bridge Co., Cleveland, O	890	1,359	—
John ———, Danville, Ill	890	1,340	—

*Accepted. [1]Williamsport, Ind.

OSCEOLA, WIS.—The bridge over the St. Croix at this place is reported as damaged to the extent of $3,000 April 1 by an ice gorge, the west span being carried away.

DES MOINES, IA.—J. H. Killmar, of this city, has been awarded contracts for constructing three iron bridges in Clay county.

IOWA CITY, IA.—The yearly contract for building all 16 to 100-ft. wooden and iron bridges for Johnson County has been awarded to E. H. Jaynes & Co., Iowa City, Iowa.

ROCK RAPIDS, IA.—Reports state that this (Lyon) county will build $25,000 worth of new bridges.

SIOUX RAPIDS, IA.—The following bids were received April 6 for constructing a steel bridge over the Little Sioux River at this place:

Wrought Iron Bridge Co., Canton, O	$6,075 and	$5,940
N. M. Stark & Co., Des Moines, Ia.	$5,000, $5,400	6,900
J. B. Marsh, Des Moines, Ia. (6 plans)	$5,200 to	5,775
J. R. Sheeley & Co., Des Moines, Ia		5,775
Geo. E. King Bridge Co., Des Moines, Ia.	$6,340 and	6,250
J. G. Ratcliffe, Waukon, Ia	$6,880 and	6,275
O. H. Austin, Webster City, Ia		6,800
J. Quackenbush, Webster City, Ia	$5,600 and	6,000
Gillette-Herzog Mfg. Co., Minneapolis, Minn.	$6,100	6,300
J. H. Killmar, Des Moines, Ia		5,969
Milwaukee Bridge & Iron Works, Milwaukee, Wis	$6,300 and	6,750
C. E. H. Campbell, Council Bluffs, Ia	$5,600 and	5,400
Clinton (Ia.) Bridge & I. Wks.* (4 plans)	$5,900 to	7,000

*Awarded contract at $6,350.

LITTLE ROCK, ARK.—Reports state that a new steel bridge is to be built between Lincoln Ave. and Cross St. Col. T. Hartman, Supt. Pub. Wks.

ST. CHARLES, WYO.—The council is said to have ordered plans, specifications and estimates prepared for a new bridge across the Boonslick Road. Geo. L. Anderson, Cy. Engr.

DENVER, COLO.—Local papers state that the legislature has appropriated $6,000 for a bridge over Blue River in Summit county and $5,000 for a bridge over the South Platte in Logan county.

WENATCHEE, WASH.—Bids are asked until May 6 for constructing a 200-ft. bridge 18 ft. wide with a 350-ft. trestle approach across the Wenatchee River; estimated cost about $6,000. Stixrud & Nastin, Des. Engrs., Seattle, Wash., Pres. Arthur Gunn, Wenatchee Water Power Co.

LOS ANGELES, CAL.—Our correspondent informs us that the Southern California Ry. Co. will construct nine steel bridges at the following places at an estimated cost of $90,000: Cajon, Morgan Station, Lytle Creek, Orange, Olive, Colton, Arlington, Casablanca and Riverside. J. E. McNeil, Roadmaster, Los Angeles.

TORONTO, ONT.—Bids are asked until April 20 for constructing two stone abutments for a steel bridge over the River Don at York Mills. J. McDougall, County Engr.

MONTREAL, QUE.—The road committee is said to have reported to the council in favor of a new superstructure for the Seigneurs St. bridge; also for widening the Napoleon St. bridge and for the erection of a new bridge over the canal at Atwater Ave. Percival W. St. George, Cy. Surv.

BUILDINGS

MANCHESTER, N. H.—Head & Dowst have been awarded the contract for erecting the new passenger station in this city, according to reports. It is expected that the structure will be completed within a year, at a cost of $100,000.

BELMONT, MASS.—Reports state that this city will soon issue $40,000 in bonds for erecting a new school building.

NEW HAVEN, CONN.—A business building, 44 x 155 ft., is to be erected on Chapel St. for E. Moses & Co., at a cost of about $80,000. Arch., W. H. Allen, 82 Church St.

HARTFORD, CONN.—The Northwest school district of this city proposes to erect either a $20,000 addition to the present school building, or else a $50,000 structure to replace the old building. William F. Bentley, Chas. D. Huntingdon, Jas. G. Patterson and Dr. H. T. Sweet are members of the committee.

NEW HAVEN, CONN.—The erection of several new buildings for Yale University is being considered, among them being a new medical building, to cost about $35,000.

BABYLON (L. I.), N. Y.—It is reported that the American Kneipp Cure Co. will have a $100,000 sanitarium erected at West Deer Park, near this place.

BINGHAMTON, N. Y.—The following bids were received April 5 for erecting a city hall; B. W. Mosher, Cy. Clk.:

John Hardiman, Watertown, N Y	$168,000
R. Richards & Co., Utica, N. Y	165,864
H. H. Edgerton, Rochester, N. Y	158,483
Peter Vanderhoof Construction Co., Newark, N. J.	152,269
Leany Bros., Syracuse, N. Y	151,000
Andrew Douglas, Binghamton	139,683
Sullivan & Bodgley, Binghamton	138,000
A. Frederick & Sons, Rochester, N. Y	137,700
A. W. Reynolds, Binghamton	136,396
I. A. Walker & Son, Philadelphia, Pa	132,000
Miles Leonard, Binghamton	124,393
James Stewart & Co., Buffalo, N. Y. (accepted)	121,549

MEXICO, N. Y.—Bids are asked until April 10 for the erection of a hotel at this place for Capt. D. Boyd. Arch., J. H. Seeber, 11 and 12 Arcade Block.

MOUNT MORRIS, N. Y.—Bids are asked by the Mount Morris union free school district until April 20 for erecting a brick annex to the central school building in said district. A. C. Olp, Clk. Bd. Education.

NEW YORK, N. Y.—Reports state that a syndicate has purchased the property of the Hoffman Bros. at 9 to 13 Maiden Lane, and that a 15-story steel building will be erected thereon.——Col. Waring, Comr. Dept. Street Cleaning, contemplates the erection of a stable for departmental use at West 89th St.—Thomas Williams proposes to have four 4-story apartment houses erected at 159th St. and Elton Ave. Arch., Albert E. Davis, 2558 3d Ave.——Plans have been filed by Robert Kelley, 533 West 147th St., for nine 3-story brick dwellings on Hamilton Terrace, to cost $108,000. Arch., William Strom, 44 Broad St.; by the city for a 5-story brick school building on Hester St., to cost about $130,000. Arch., C. B. J. Snyder, 587 Broadway; by Theo. A. Cordler, 1 East 106th St., for four 5-story brick flats and store buildings on 113th St., to cost $119,000. Arch John Hauser, 1441 3d Ave.; by Frank E. Wise, 236 West 101st St., for seven 4-story brick and stone dwellings on 113th St., estimated cost, $97,500, Arch., Geo. A. Schellinger, 128 Broadway; by Jas. D. Butler, 1 Union Square, for seven 5-story brick flat and store buildings at Amsterdam Ave. and 164th St., to cost about $230,000, Arch., John E. Darragh, 217 West 125th St.; by Ernest C. Keri, 18 West 119th St., for four 5-story brick flats on 119th St., to cost $126,000, Arch., John Hauser, 1441 3d Ave.; by Frank W. Gilbert, 163d St. and Mott Ave., for six 5-story flat and store buildings at Bradhurst Ave. and 148th St., to cost about $125,000, Arch., H. Anderson, 1180 Broadway; by Francis S. Kinney, Pequannock, N. J., for a 5-story brick dwelling on 54th St., to cost about $50,000, Arch., Wm. E. Bloodgood, 64 Cedar St., Builders, Robinson & Wallace, 123 East 23d St.; by Michael McCormack, 50 West 127th St., for two 5-story brick flats at 121st St. and Morningside Ave., to cost about $100,000; by Archibald D. Russell, Tuxedo, N. Y., for a 7-story brick

office building at 39th St. and 5th Ave., to cost $125,000. Builder, John Downey, 410 West 34th St., Archs., Clinton & Russell, 32 Nassau St.; by Wm. Waldorf Astor, 21 West 26th St., for an 8-story brick office building, at 21 to 25 West 33d St., estimated cost, $200,000, Arch., H. J. Hardenbergh, 10 West 23d St.; by John McLaughlin, 1115 Madison Ave., for six 5-story flat buildings on 92d St., to cost about $138,000, Arch., John Hauser, 1441 3d Ave.; by Sheehy & Regan, 1229 Lexington Ave., for five 5-story brick flats, to cost about $100,000, Arch., Chas. Stegmayer, 306 East 82d St.——Chas. H. Kivlen, 1629 Madison Ave., expects to erect a 10-story brick apartment house at Madison Ave. and 93d St. to cost about $125,000, Arch., George W. Spitzer, 37 Maiden Lane.——It is reported that L. G. & G. B. Bloomingdale, 21 East 63d St., will make alterations to their 6-story brick building at 3d Ave. and 60th St., to cost about $200,000. Arch., Buchanan & Deisler, 11 East 59th St.

NEW YORK, N. Y.—Bids are asked until April 22 for rebuilding three wards of the male department of the Manhattan State Hospital at Ward's Island. H. E. Howland, Pres. Bd. Mgrs., 1 Madison Ave.——Plans have been filed by Emma R. Selliere, 145 Madison Ave., for a 20-story brick office building at 225 and 227 5th Ave., to cost $500,000, Archs., Harding & Gooch, 253 Broadway; by John A. Roebling Sons & Co., and Henry L. Shipsy, 117 Liberty St., for a 16-story brick office building at 117 to 121 Liberty St., to cost about $500,000, Archs., Harding & Gooch., 253 Broadway.——The following bids were received April 5 by the board of education for heating a new school building on 4th St.:

Jas. Curran Mfg. Co., 512 W. 36th St.	$13,200
Frank Dobson, 218 E. 42d St.	12,995
Evans, Almirall & Co., 41 Dey St.	13,969
John Neal's Sons, 218 Centre St.	13,375
Blake & Williams, 186 S. 5th Ave.	12,379
Baker, Smith & Co., 81 West Houston St.	12,189
E. Ritzler, 178 Centre St.	11,536

For erecting an annex to school No. 94:

John H. Deeves, 287 4th Ave.	$76,564
Mahony Bros., 52 New Bowery	83,500
Tolmie & Luyster, 208 W. 80th St.	70,770
Luke A. Burke, 22d St. and 4th Ave.	70,773
P. Gallagher, 822 Broadway	85,900

SARATOGA SPRINGS, N. Y.—Reports state that a syndicate will soon erect a $500,000 hotel in this city on North Broadway. Eugene F. O'Conner, Brooklyn, is interested.

TROY, N. Y.—Reports state that Wm. H. Frear will erect a 4-story business building in this city to cost about $200,500.

BOONTON, N. J.—Marinus Houman, 2 Crosby Place, Paterson, N. J., who was selected to prepare plans for the school building projected at this place, plans for which were advertised in Engineering News, writes us that there was a mistake made in the meeting, hence the election was illegal and will have to be gone over again.

FORT HANCOCK, N. J.—Bids are asked until May 10 for furnishing mantels for buildings under construction at this place, as stated in our advertising columns. Address Capt. C. A. Devol, Constructing Q. M., U. S. Army, Fort Hancock.

JERSEY CITY, N. J.—A new school building, to cost about $75,000, is to be erected on York St., on the site of the old building. Arch., Hugh Roberts, 76 Montgomery St.

PASSAIC, N. J.—Bids were asked until April 14 for the erection of a combined fire engine building and police station to cost about $40,000; work is to begin on May 1. Cy. Engr., C. R. Wise; Cy. Clk., R. B. Tindall.

PHILADELPHIA, PA.—Reports state that plans are being prepared for a church building to be erected at 42d St. and Kingsessing Ave., to cost about $75,000. Arch., J. Cather Newsom, 409 New York St.——Bids are asked by the board of education, 713 Filbert St., until April 20 for new heaters, repairing, etc., for a number of school buildings in this city. H. W. Halliwell, Secy. Com. on Property.

PHILADELPHIA, PA.—Plans have been accepted for the bank building to be erected at 41st St. and Haverford Ave., by the West Philadelphia Land Title and Trust Co.; estimated cost, $40,000. Arch., Walter Smedley, 435 Chestnut St.

PITTSBURG, PA.—Reports state that Mrs. William Thaw, Jr., has donated $25,000 for the erection of a bath house for the working classes at 16th St. and Penn Ave. Dr. Thomas Turnbull, Allegheny, Pa., is interested.

SCRANTON, PA.—It is reported that a 5-story stone department store building, to cost $150,000, is to be erected on the site of the old Wyoming House. Arch., L. C. Holden, 3 Union Square West, New York.

BALTIMORE, MD.—The erection of a $35,000 annex to the city jail, to be used as a house of detention, is contemplated.

WASHINGTON, D. C.—Bills providing for the construction of the following buildings have recently been introduced in Congress: Northampton, Mass., $75,000; Greensburg, Pa., $75,000; Spokane Falls, Wash., $150,000. One bill provides for the erection of a municipal building for the District of Columbia and appropriates $2,500,000 for the purpose.

NORFOLK, VA.—It is reported that the hotel for the Monticello Realty Co. will be constructed by P. J. Hunt, Richmond, Va.; also that bids for heating, plumbing, etc., will soon be asked; estimated cost, $750,000.

MORGANTOWN, W. VA.—The erection of a $50,000 school building to replace the one recently destroyed by fire, is contemplated.

ATHENS, GA.—Bids are asked until April 23, for the erection of a 3-story brick building at the University of Georgia, in this city. A. L. Hull, Secy. Bd. of Trustees.

MERIDIAN, MISS.—The following bids were received April 6 by Wm. M. Aiken, Supervising Arch., Washington, D. C., for the low pressure hot water heating and ventilating apparatus for the U. S. public building in this city, as advertised in Engineering News:

Chafer & Becker, Cleveland, O.	$3,639	60 das.
Senseman & Brickenstein, Salem, N. C.	3,156	....
Bayley Heating Co., Milwaukee, Wis.	3,332	*60 das.
Schwab & Sercomb, Milwaukee, Wis.	3,600	60 das.
Chas. B. Kruse Heating Co., Milwaukee	4,357	*60 das.
E. Rutzler, New York, N. Y.	5,980	60 das.
Shook Anderson Co., Pittsburg, Pa.	3,974	60 das.
J. T. Foley & Co., Evansville, Ind.	4,516	60 das.
Edwin H. Wehle, Louisville, Ky.	4,118	60 das.
Zellers & Co., Washington, D. C.	3,572	60 das.
Modern Heating Co., St. Louis, Mo.	4,162	*60 das.
Samuel I. Pope Co., Chicago, Ill.	3,379	50 das.
George W. Staple, Meridan, Miss.	3,350	*60 das.

*Working days.

NEW ORLEANS, LA.—The construction of the new Common St. addition to the St. Charles hotel, mentioned in our issue of March 18, has been awarded to the Gillette-Herzog Mfg. Co., Minneapolis, Minn., at $28,000.

JACKSON, TENN.—Bids are asked until April 20 for erecting a 3-story school building, 93 × 128 ft., on College St., also for completing the second story of the West Jackson school building; also for heating and ventilating of the same. Chn., M. B. Hurt; Cy. Engr., S. C. Lancaster.

KNOXVILLE, TENN.—A fire in this city on April 8 destroyed property valued at about $1,000,000. The principal buildings destroyed were the following: McNulty, loss, $45,000, insurance, $27,000; Daniel Briscoe Bros. & Co., loss, $40,000, insurance, $35,000; J. C. Cullin, loss, $40,000; R. S. Payne, loss, $30,000, insurance, $15,000; C. C. McGhee, loss, $30,000.

LOUISVILLE, KY.—Reports state that plans for a new $45,000 church edifice have been accepted by the Broadway Methodist Church; T. L. Jefferson is a member of the building committee. Arch., R. H. Hunt, 8 and 9 Keystone Bldg., Chattanooga, Tenn.

RICHMOND, KY.—Bids are asked until April 27 for furnishing the labor and materials required for the approaches to the post-office building at this place. Supervising Arch., Wm. M. Aiken, Washington, D. C.

DAYTON, O.—It is reported that the west wing of the Phillips House was destroyed by fire, causing a loss of $50,000; insurance for full amount.

DETROIT, MICH.—Plans have been prepared for a 5-story apartment house to cost about $75,000. Arch., William S. Joy, 39 Hodges Bldg.

GREENVILLE, ILL.—Wm. D. Matney, County Clk., writes us that Bond county is erecting in this place a new jail and sheriff's residence, to be completed by June 30. County Engr., J. J. Sutton.

MILWAUKEE, WIS.—Reports state that 5-story business block is to be erected at once by the E. Harrison Cawker estate, at West Water and Wells Sts., to cost about $200,000.

ALEXANDRIA, MINN.—Bids are asked by the board of education until May 3 for erecting a school building in this place. Secy., Geo. G. S. Campbell; Treas., George S. Spaulding; Archs., Orff & Joralemon, 615 Lumber Exchange Bldg., Minneapolis, Minn.

JANESVILLE, MINN.—Bids are asked by F. H. Miner until April 17 for erecting a 2-story brick and stone business building, 44 × 100 ft. Arch., Frank Thayer, Mankato, Minn.

JORDON, MINN.—Bids are asked by the school board of this place for erecting a school building. Clk., Henry Nicolin; Archs., Orff & Joralemon, 615 Lumber Exchange Bldg., Minneapolis, Minn.

CLINTON, IA.—Bids are asked until May 3 for the metal and wood work for the new Clinton county court house. F. Horn, County Auditor; G. D. Staggs, Chn. Bd. Supervisors, De Witt, Ia.

DAVENPORT, IA.—It is reported that plans have been accepted for the new 2-story jail building to be erected here at a cost of $50,000. Archs., Clausen, Hubbell & Burrows, 205 West 3d St.

WATERLOO, IA.—Bids are asked until April 29 for erecting a high school building at this place. Secy. Bd., Lewis Lichty; Archs., Orff & Joralemon, Lumber Exchange Bldg., Minneapolis, Minn.

LINCOLN, NEB.—The legislature appropriated $30,000 for erecting a school of mechanics' arts for the University of Nebraska, according to reports.

TOPEKA, KAN.—It is reported that $60,000 will be spent this summer toward the completion of the state capitol building.

BROOKINGS, S. DAK.—Bids are asked until April 22 for erecting a brick jail and sheriff's residence. County Auditor, J. T. Nelson; Archs., Pass & Schippel, First National Bank Bldg., Markato, Minn.

ST. LOUIS, MO.—Permits have been granted to the Samuel Cupples Realty Co. for the erection of two 6-story brick warehouses at Cupples Station, to cost $108,000.——Chas. S. Taussig will have a 5-story business building, 60 × 90 ft., erected in this city. Archs., Grable, Webber & Groves, 509 Olive St.

EASTLAND, TEX.—Bids are asked until May 2 for erecting a court house at this place, to cost about $60,000.

GALVESTON, TEX.—Bids are asked until May 10 for erecting a new county court house in this city, for which purpose $200,000 in bonds have been issued. Archs., N. J. Clayton & Co., 22d and Strand Sts.

GATESVILLE, TEX.—Bids are asked until April 19 for erecting a county court house building at this place, to cost between $50,000 and $70,000. T. C. Taylor, County Judge.

GATESVILLE, TEX.—Bids are asked until April 19 for erecting a court house to cost about $70,000, including heating and ventilating plants, plumbing and electric wiring; also for erecting a jail, to cost about $70,000, including heating, etc. T. C. Taylor, County Judge.

CHINO, CAL.—B. K. Galbreath expects to erect a brick business block at D and 6th Sts.

LOS ANGELES, CAL.—Reports state that the Raymond hotel will be replaced by a $250,000 building. C. H. Montague, Boston, Mass., is interested.

SAN BERNARDINO, CAL.—It is reported that Messrs. Smiley intend to erect a $30,000 public library building on the proposed park grounds. A $70,000 hotel is also contemplated.

SAN DIEGO, CAL.—Reports state that J. W. Sefton & Co., of Terre Haute, Ind., will soon begin the erection of a brick block, to cost $150,000, on lots adjoining the Fisher Opera House.

YREKA, CAL.—It is reported that a new hotel, to cost $25,000, will soon be erected in this place.

FORT DOUGLAS, UTAH.—Bids are asked until April 29 for furnishing the material and labor requisite for the construction, plumbing and heating of a bath house for enlisted men at this place. Address Lt.-Col. E. B. Atwood, Denver, Colo.

WATER-WORKS.

ADAMS, ME.—The Adams Water Co. has been incorporated with a capital stock of $25,000, by John Littlefield, Bremer, Me.; F. H. C. Reynolds, Boston, Mass.; J. L. Coombs, Bangor, Me., and others.

AUBURN, ME.—It is stated that the water board has voted to secure plans for a new reservoir.

BANGOR, ME.—The water board is discussing the question of building a stand-pipe on Thomas Hill, to cost about $20,000. Supt., M. A. Sinclair; Ch. Engr., D. F. Webber.

PARIS, ME.—The Paris Hill Water Co. has been organized and will build about three miles of water mains. Pres., G. M. Atwood.

BARTLETT, N. H.—C. H. George, Water Comr., writes us that it has just been decided to put in a new system; the supply to be taken from Albany Brook. No plans have yet been prepared.

DANVILLE, VT.—M. W. Tinker, Vice-Pres. Village Improvement Society, writes us that there have not yet been any steps taken towards putting in a water system.

BILLERICA, MASS.—H. A. King, Town Clk., writes us that the town has not yet accepted the commissioner's report for works for this place.

BROOKLINE, MASS.—At a town meeting last week it was voted to appropriate $35,900 for the maintenance and extension of the works. L. C. Wead is interested.

CLINTON, MASS.—The water commissioners are said to be considering estimates for constructing a tank on Burditts Hill of 200,000 gallons capacity; estimated cost, $4,000.

GLOUCESTER, MASS.—The question of purchasing about $20,000 worth of water pipe is being considered.

HOLYOKE, MASS.—Bids are asked until April 16 for laying about 56,000 ft. of 20-in. cast-iron water pipe; estimated cost, about $30,000; bond, $5,000. M. P. Conway, Water Comr.

HUDSON, MASS.—We are informed that contracts are to be let for laying three miles of 18-in. water pipe; valves have not as yet been bought. Engr., B. R. Felton, Tremont Bldg., Boston, Mass.

MALDEN, MASS.—The aldermen have voted to appropriate $25,000 for extending the works, according to local papers.

QUINCY, MASS.—The council has voted to appropriate $30,000 for extending the water mains.

STOCKBRIDGE, MASS.—D. A. Kimball, Treas. and Gen. Mgr. Stockbridge Water Co., writes us that the company does not contemplate any new work at present, as has been reported.

WHITMAN, MASS.—Waldo Dyer, Chn. Water Comrs., writes us that it is proposed by Brockton to take water from Silver Lake for its proposed increased water supply. This will necessitate the laying of a 30 or 40-in. pipe through Hanson and Whitman to Brockton, a distance of 13 miles. This will be able to furnish Whitman with water, which town is in need of a new supply. If Brockton does not move in the matter at once Whitman will secure the lake independently of Brockton. It is probable that Brockton will take immediate action to investigate and make surveys.

WALLINGFORD, CONN.—The water commissioners have voted to extend the 4 and 2-in. mains in four streets.

ALBANY, N. Y.—The water commissioners have asked for bids for laying 8 and 6-in. water mains in a number of streets.

CHAMPLAIN, N. Y.—The question of constructing water-works is being considered, according to reports.

COEYMANS, N. Y.—The Albany County Water Co. has been incorporated to supply water to Coeymans, for which permission has been granted; capital stock, $100,000. The source of supply is in the bluestone region from the Hannocroix Creek. Directors, Edmund C. Lockwood, Willard F. Inman, 100 W. 81st St., New York; A. McKenney, J. A. Hannay, William G. Chittich, Jr., and Hugh Doon, New York, and L. F. Braine, 64 Carroll St., Brooklyn.

HEMPSTEAD (L. I.), N. Y.—Press reports state that work will soon be begun on the improvements to the works for this place, improvements for which were recently voted. The work will include four new wells of 3,000,000 gallons capacity, and the extension of the mains for several miles.

KINGS PARK (L. I.), N. Y.—The question of securing a new water supply from Lake Harned for the Long Island State Hospital is being considered by the state commission and the board of managers.

MILLBROOK, N. Y.—The committee is making arrangements for constructing works to cost about $15,000. W. L. Swift, a member of the water committee, writes us that there is no money in this project for any one until a company is organized. The estimated value of stores and goods classed by insurance companies as extra hazardous is $200,000; population, 820.

HUNTER, N. Y.—John A. Longyear, of Kingston, N. Y., is reported to have secured the contract to build works at this place.

PITTSFORD, N. Y.—G. T. Vought, Village Pres., is urging the construction of works estimated to cost about $14,000. Dr. Andrew Whitlock, Water Comr.

SYRACUSE, N. Y.—The water board is discussing the question of issuing $200,000 in bonds for extending the water mains.

TROY, N. Y.—The water commissioners are considering the question of securing an increased water supply, estimated cost, about $700,000. President Gleason may be addressed.

CAPE MAY, N. J.—It is reported that the council has ordered the sinking of 20 additional wells for an increased water supply.

HOBOKEN, N. J.—Bids are asked until April 30 for a supply of pure water for a term of 15, 20 or 25 years, as stated in our advertising columns. Henry Lohmann, Jr., Water Register, Hoboken.

KEARNEY, N. J.—Bids are asked until April 27 for furnishing and laying 12,000 ft. of water mains, as stated in our advertising columns. Burton E. Canfield, Township Clk.

LODI, N. J.—Foster & Foye, 11 Broadway, New York, have been engaged to draw up the plans and specifications for the construction of the water supply system to be built by the Lodi Water Co.

WILDWOOD, N. J.—The Wildwood Water Co. has been granted a franchise to construct works in this place. There will be required about 17,000 ft. of 10 and 4-in. pipe. F. E. Smith, Mayor.

BRADDOCK, PA.—It is stated that the council has decided to construct a reservoir to cost about $100,000.

CHARTIERS, PA.—The plant of the St. Clair Water Co. has been sold to the Chartiers Valley Water Co. It is reported that the new owners will extend the plant and make a number of improvements. Pres., James W. Scully.

ERIE, PA.—Local papers state that the following bids were received by the water commissioners April 5 for constructing a pumping station: Henry Shenk, boiler house, $13,171; brick stack, $9,866; total, $23,037. Fred Zeisinger, boiler house, $13,499; brick stack, $10,607; total, $24,056, and Constable Bros., boiler house, $12,648; brick stack, $12,459; total, $25,107.

FREEDOM, PA.—The Freedom Water Co. was incorporated April 8 with a capital stock of $15,000, of which $1,500 is paid in. Treas., James A. Harvey, Freedom.

LANCASTER, PA.—The mayor has urged the council to make arrangements for improving the works, for which the citizens in February voted to issue $125,000 in bonds.——The finance committee has been instructed to make an appropriation of $7,200 for the purchase and laying of 4,800 ft. of 16 and 12-in. pipe. Supt., Edward Frailey.

PHILADELPHIA, PA.—Thos. M. Thompson, Dir. Pub. Wks., in his annual report has recommended the con-

struction of a new reservoir in West Philadelphia, and also one in the Frankford District, and additional pumping engines at Belmont and Roxbury pumping stations, and extensions to the mains.

PITTSBURG, PA.—The following bids were received April 6, for constructing a 125,000,000-gallon reservoir at Highland Park: Jonathan Clark & Son's Co, Chicago, $409,386; McArthur Bros., Chicago, $441,913; Werneberg, Sheehan & Co., New York, $484,207; the T. A. Gillespie Co., $494,929; Booth & Flinn, $499,780; George T. Richards, $538,070; James H. McQuade, $558,436; Sloan, McIlrain & Ott Bros., $559,679; James Stewart & Co., St. Louis, Mo., $566,100; J. C. McSpadden,, $568,245; Thomas McNally & Co., $573,099; Joseph Gianini & Co., $588,590; C. J. & A. W. McDonald, $609,487; George E. Egan, $618,-118. The bidders are from Pittsburg, except when otherwise stated. The following bids were also received for making improvements at the Herron Hill reservoir: The T. A. Gillespie Co., $9,000; George F. Egan, $18,300; Crotin & O'Herron, $12,200; W. A. Adams, $16,877; James H. McQuaide, $9,500; Timothy M. Scanlon, $9,100; Evan Jones, $17,875; Sloan, McIlvane & Ott Bros., $9,833; P. Moran, $14,928; Keeling & Ridge, $6,978; Sweeney & Huston, $8,782.——It is reported that the Edgeworth Water Co. has awarded to John Patton, of Sewickley, Pa., the contract for constructing a plant to cost about $30,000. Pres. and Gen. Mgr., E. P. Young, Pittsburg.

SEWICKLEY, PA.—It is reported that the works of this place will be extended by the construction of a new reservoir of 500,000 gallons capacity and about 5,000 ft. of 12 and 4-in. mains. J. J. Knox, Clk.; E. B. Taylor, Pres. Water-Comrs.

WESTCHESTER, PA.—The councils are considering the question of an extension to the pumping station to cost about $60,000. It is said that the contract for constructing works at Milltown, on Chester Creek, will soon be let.

ABERDEEN, MD.—Bids are asked until April 26 for the purchase of $15,000 in water bonds for constructing the works, as advertised in Engineering News, the contract for constructing which was awarded to W. G. Fritz, Quarrytown, Pa. The supply will be taken from six springs. We noted in our issue of April 8 to whom the contracts for furnishing supplies were awarded. J. A. Swingley, Clk.

PETERSBURG, VA.—We are informed that there will probably be no improvements to the water-works very soon. M. T. Patteson, Chn. Com.; Thos. R. Dunn, Cy. Engr.; J. B. Gill, Cy. Audr.

APEX, N. C.—We are informed that the Apex Lumber Co., of Lynchburg, Va., is in the market for bids to have a well drilled at Apex, N. C., on the Seaboard Air Line.

WILMINGTON, N. C.—The Excelsior Artesian Well & Sewerage Co. has been organized. Pres., W. E. Worth; Vice-Pres., Geo. H. Locey; Secy. and Treas., F. H. Stedman; Supt., C. H. Leach.

UNION, S. C.—F. M. Farr, Chn. Water-Works Com., writes us that a well is being drilled to ascertain the advisability of securing a water supply. Engr., N. Wilson Davis, Atlanta, Ga.

BAXLEY, GA.—J. H. Thomas, Mayor, writes us that specifications have been completed for pumps, a reservoir and pipes to cost $5,760. Engr., S. K. Felton, 220 Temple Court, Atlanta, Ga.

JACKSONVILLE, FLA.—Bids are asked until April 20 for furnishing labor and materials for a reservoir 200 x 160 ft., and 12 ft. deep. R. N. Ellis, Supt.; B. F. Dillon, Chn.

MONTICELLO, FLA.—A. B. Harrison, Clk., writes us that at an election held April 6 the people voted against issuing $10,000 in bonds for works. The question will probably be brought up again in the near future.

OPELOUSAS, LA.—It is reported that B. F. Rounds, of Texas, has been awarded the contract for constructing the water-works and an electric light plant at $29,700.

HATTIESBURG, MISS.—The Hattiesburg Water Co. has been organized by John F. Schampenois, C. E. Rich and others; capital stock, $16,000.

SUMMIT, MISS.—J. B. Holden, Mayor, writes us that the city is considering estimates for building works to cost $3,000. The work will require a 100,000-gallon wooden tank, 40 ft. high, about 600 ft. of mains, and about six plugs.

HAWESVILLE, KY.—The W. H. Williams Bros. Co. proposes to construct works, according to reports.

DYERSBURG, TENN.—The aldermen have granted a franchise to the Dyersburg Water & Electric Light Co. W. A. Fowlkes, Jr., Mayor.

GREENEVILLE, TENN.—It is reported that the Greeneville Water-Works Co. wants to purchase about 100 tons of pipe, 16 hydrants, 20 gas valves, etc. H. Reaves may be addressed.

CLEVELAND, O.—The following bids were recently received for constructing an engine and boiler house at the Division St. pumping station of the water-works: D. & G. Griese, $21,741; Chauncey N. Griffin, $23,155; C. H. Fath & Son, $23,270; D. Lindhorst, $23,698; James Rockford, $24,263; T. H. Brooks & Co., $24,797; Andrew Dall, $24,891; J. A. Reaugh & Son, $25,914; John Gill & Son, $26,970; Watterson & Clagne, $29,887; Anders & Villwock, $34,968.

MEDINA, O.—Bids are asked until April 30 for constructing a steel stand-pipe, 14 x 90 ft.; a deep well pumping engine, about 1,860 ft. of 8 and 6-in. pipe, etc., as stated in our advertising columns. N. H. McClure, Mayor; Engr., B. J. Ashley, Opera House Block, Chicago; Hiram Goodwin, Clk.

FORT WAYNE, IND.—It is reported that Dennis Long & Co., Louisville, Ky., have been awarded the contract for furnishing about 12,000 ft. of water pipe at $15.74 per ton.

FORT WAYNE, IND.—The committee has decided to sink an additional well for an increased water supply, according to reports.

LAFAYETTE, IND.—It is reported that H. R. Worthington, New York, N. Y., has been awarded the contract for furnishing pumping engines for this city.

COLOMA, MICH.—The question of issuing bonds for works is being considered, according to reports.

UPPER ALTON, ILL.—At the next election the people of this place will vote on the question of building works and an electric light plant to cost $50,000.

BELLEVILLE, ILL.—Col. John Martin, of New York, and Henry Leschen are reported to have been awarded the contract for constructing works in this city to cost about $15,000.

CHICAGO, ILL.—The following bids were received April 11 for constructing two pump stations. Joseph Downey, Comr. Pub. Wks.:

	Springfield Ave.	Central Park Ave.
John P. Agnew	$124,068	$128,634
Angus & Gindele	131,296	146,004
L. L. Leach	134,710	147,405
C. W. Gindele	133,876	146,533
J. Clark & Son	137,269	150,439
Earnshaw & Goldie	139,040	153,572
H. Mueller	148,860	.....
Hennessey Bros	145,834	.....
Heidenreich & Son	128,500	142,067

GREENUP, ILL.—It is reported that Waltz & Ward have been awarded the contract for constructing works, as advertised in Engineering News, at $13,265. Engr., D. W. Mead, Rockford, Ill.; M. T. Monohon, Clk.

NORMAL, ILL.—The council of this place is reported to be considering a proposition from the White Water-Works Co., of Chicago, to construct a plant here. Pres., J. L. White, Chicago.

AUDUBON, IA.—We are informed that the town expects to build a wooden tank for its water-works some time this summer. The time for letting the contract has not yet been decided. The town has on hand all the pipe and hydrants that will be required.

BENSON, MINN.—Bids are asked until April 27 for constructing works; the supply to be from wells; population, 1,255. Engr., C. F. Loweth, 94 East 3d St., St. Paul, Minn.; C. L. Scofield, Pres. Water Comrs.; J. N. Edwards, Recdr.

CRESTON, IA.—The dam of the water company is reported to be in such a bad condition that it will require about $10,000 to repair it.

MABEL, MINN.—It is reported that the town has voted to construct works.

LEROY, MINN.—M. T. Dunn, Pres. Council, writes us that bids will be opened in May for constructing an elevated tank for a new water supply, to cost about $8,000. Des. Engrs., Fairbanks, Morse & Co., St. Paul.

MISSOULA, MONT.—It is reported that the water company has plans prepared for constructing a new supply ditch from Upper Rattlesnake Creek to the distributing reservoir. It is reported that work will be commenced as soon as the weather will permit.

WHITE SULPHUR SPRINGS, MONT.—At the election to be held soon the question of issuing bonds for works will be voted upon.

BURLINGTON, KAN.—The superintendent of the Burlington Water-Works Co. writes us that the improvements demanded in the compromise ordinance will require a general overhauling and an enlarging of parts of the plant. A portion of this work has already been completed.

NEWTON, KAN.—H. V. Hinkley, Topeka, Kan., has been engaged by the city to take charge of the new water supply extension. This extension will require about 35,000 ft. of 12-in. pipe and is estimated to cost $50,000, as stated in our issue of April 1. P. M. Hoisington, Chn. Com.

CRAWFORD, NEB.—A. E. Hobson, Mayor, writes us that the town will extend the water mains this year, bids for which have not yet been asked. Address C. J. Grable

BENTONVILLE, ARK.—It is reported that Reese Bros., of Fayetteville, Ark., have been awarded the contract for constructing works.

SILOAM SPRINGS, ARK.—W. H. Davey, Secy. Bd. of Improvements, writes us that the contracts will probably be let in 60 days for constructing duplicate pumps, steel stand-pipe, four miles of mains, 40 hydrants and an incandescent light plant. Engr., J. M. Walker, Coffeyville, Kan.

WARREN, ARK.—W. J. Savage, Chn. Improvement Com., writes us that bids will soon be wanted for constructing works. The pumps, tank, tower, engines, etc., have been placed on the ground, but there will be required cast-iron pipe; hose, valves, hydrants, etc.

CHEYENNE, WYO.—H. P. Patten, Cy. Engr., writes us that the following bids were received April 6 for constructing 2,200 ft. of 24-in. stoneware water pipe: Nash & Cook, Cheyenne, Denver pipe (accepted), $3,315; Kansas City pipe, $3,675, and C. E. McGarvey & Co., Cheyenne, $3,575.

KANSAS CITY, MO.—Local papers state that the National Boiler Co., of St. Louis, has been awarded the contract, at $11,695, for furnishing two boilers and a chain stoking machine for smoke consumption for the Turkey Creek pumping station, as advertised in Engineering News.

ABILENE, TEX.—The Lyttle Water Co. has been incorporated with a capital stock of $20,000, by Fred Cockerel, J. E. Ritchie and others.

HEMPSTEAD, TEX.—E. Hanser, Secy., Hempstead Artesian Water Co., writes us that the contract for water pipe has been let, also for the stand-pipe, 110 x 20 ft., four miles of mains, one 500-incandescent light plant and a 25-ton ice plant. Pres., C. W. Le Grand.

RICHMOND, TEX.—J. T. Weed, of Houston, Tex., is reported to have been awarded the contract for constructing works at this place.

SAN ANGELO, TEX.—It is reported that the question of having the San Angelo Water Supply Co. supply this place for fire protection is being considered.

CRIPPLE CREEK, COLO.—The Cripple Creek District Reservoir Water & Power Supply Co. has been incorporated; capital stock, $100,000. It is proposed to take the water from four creeks in the district and store it in reservoirs for supplying the various towns with water and generating electric power. Lucian D. Ross, Maynard Consul and William T. Doubt, directors.

FLORENCE, COLO.—At an election held April 6 it was voted to construct works, according to reports. M. E. Lewis, Mayor.

GRAND JUNCTION, COLO.—Press reports state that the result of the election on April 6 was against the issuing of $250,000 in bonds for supplying this place with water from the mountains, but in favor of the Bucklin ordinance authorizing an issuance of $65,000 in bonds for either purchasing the present works or constructing a new plant. W. P. Ela, Mayor.

TRINIDAD, COLO.—It is reported that $297,000 in bonds will be issued at once, the proceeds of which will be used for the purchase by the city of the water-works.

FLAGSTAFF, ARIZ.—The city has sold $60,000 in bonds for constructing water-works. The source is said to be located about 16 miles from this place.

MARCUS, WASH.—It is reported that water-works will be constructed for this place.

SEATTLE, WASH.—Local papers state that the council will ask for bids about June 1 for constructing new works; the supply to be from Cedar River. A bond of $500,000 will be required from the contractors securing the work. Councilman Rudy, Chn. Com., and Mayor Wood may be addressed.

SPOKANE, WASH.—The question of extending the water-works to the Army Post is being considered.

OCEANSIDE, CAL.—The question of the supply for this and adjoining towns is being investigated by the town trustees. Surveys have been made and the report will soon be filed. Arthur L. Evans, 401 California St., San Francisco, Cal., is in charge of the work.

SAN FRANCISCO, CAL.—The Blue Mountain Water Co. has been incorporated by John T. Smith, Philip S. Musgrave, Rudolph Jordan, Jr., and others.——Local papers state that the Spring Valley Water Co. will construct a reservoir to supply Southern Heights. Secy., James Gluskin.

YOLO, CAL.—It is reported that the people of this place propose to construct a system.

SEWERAGE.

BOSTON, MASS.—Bids are asked by the sewerage commissioners, 1 Mount Vernon St., until April 24 for constructing section 30, metropolitan sewer system in Melrose and Wakefield, including about 4,686 ft. of 12 to 18-in. brick and pipe sewer; average cut, 13 ft. Wm. M. Brown, Ch. Engr.

BOSTON, MASS.—Reports state that the capacity of the storage basin at the Moon Island outlet will be increased, at an estimated cost of about $300,000. Benj. W. Wells, Supt. Sts.

CONCORD, MASS.—Richard F. Barrett, Chn. Electric Light Com., writes us that this town will build a sewerage plant in connection with the electric light plant, and that the work will probably be started in the spring of 1898.

LEXINGTON, MASS.—Reports state that the legislature has been petitioned for permission to construct a sewer system to connect with the metropolitan system.

NEWTON, MASS.—The board of aldermen has, it is said, authorized the city treasurer to issue $100,000 in 30-year 4% bonds for sewer construction. H. D. Woods, Cy. Engr.

QUINCY, MASS.—About $120,000 will be appropriated by this town for sewer construction, according to reports. E. W. Branch, Cy. Engr.

SOMERVILLE, MASS.—This city will appropriate $45,-000 for constructing a storm water drain from Mystic River to Pearl St., according to reports. Ernest W. Bailey, Cy. Engr.

SPENCER, MASS.—Reports state that this town is considering the construction of a filter bed. N. E. Craig, Cy. Engr.

WEBSTER, MASS.—Press reports state that this town has appropriated $15,000 for a sewer from Church Court to the bridge below Chaseville.

PAWTUCKET, R. I.—Bids are asked, according to reports, until May 7, for supplying brick, pipe and cement as needed, for constructing sewers. Geo. A. Carpenter, Cy. Engr.——Estimates are being prepared for a sewer in Middle St., from Blackstone Ave. to the American Yarn Mfg. Co.'s works.

NEW HAVEN, CONN.—Bids were asked until April 14 for constructing sewers in 11 streets. C. W. Kelly, Cy. Engr.

BUFFALO, N. Y.—A 4½-ft. sewer, in South Buffalo, will be constructed at an estimated cost of $26,700.

JAMAICA (L. I.), N. Y.—Press reports state that the sewer bonds were sold April 6 to the Jamaica Savings Bank and W. J. Hayes & Co., Boston, the latter taking $100,000 at 104½ and the former $50,000 at 105¾. John J. McLaughlin, Cy. Engr.

SCHENECTADY, N. Y.—Senator Brackett is said to have introduced a bill authorizing this town to issue $110,-000 in bonds for sewer construction. L. B. Sebring, Cy. Engr.

SHREVEPORT, LA.—A petition has been presented to the council asking for the construction of sewers in the Sixth ward. A. P. Hepburn, Cy. Engr.

TOLEDO, O.—Bids are asked until April 26 for constructing a 24-in. cylindrical brick sewer with a 4-in. shell in Mason St., and a 15-in. pipe sewer in Thayer St. Lem. P. Harris, Cy. Clk.; W. G. Clark, Cy. Engr.

COLUMBIA CITY, IND.—Reports state that Phillips & Goss, Martinsville, Ind., will prepare plans for a sewer system for this city. E. K. Strong, Cy. Engr.

UNION CITY, IND.—This town will build a sewer system, according to reports. Mayor Bell may be addressed.

CHAMPAIGN, ILL.—The following bids were received March 23 for completing sewer system, as advertised in Engineering News: Fell & Siddal, Trenton, N. J., $87,776; J. A. Mercier & Co., Detroit, Mich., $52,409; M. S. Jackson, Cedar Rapids, Ia., $56,854; Adams Bros., Zanesville, O., $45,871; Jas. H. Roche, Chicago, Ill., $43,741; T. J. Shea, Quincy, Ill., $44,919; Mitchell Construction Co., New Castle, Pa., $48,711; Caleb & Conture, Bridgport, O., $39,981; Geo. S. Miller & Co., Ottawa, Ill., $47,009; Clement & Co., Niagara Falls, N. Y., $71,227; Washburn & Myrick, Morgan Park, Ill., $40,411 (accepted.)

CHICAGO, ILL.—The following are the lowest bids received April 7 for constructing the intercepting sewers in the northern lake shore district; first section, Farley & Green, $166,666; second section, Nash & Dowdle, $146,-135; third section, $107,806. Reports state that Joseph Downey, Comr. Pub. Wks., will ask the council for an additional appropriation of $40,000 to build two pumping stations for the northwest water tunnel, to cost about $300,000, for which $265,000 has already been appropriated.

CHICAGO, ILL.—All bids for the large intercepting sewers have been rejected by the commissioner of public works, and the work will be readvertised.

CLINTON, IA.—Bids are asked until April 20 for constructing a 10-in. pipe sewer. E. E. Forbes, Cy. Clk.

ST. PAUL, MINN.—Bids are asked until April 19 for constructing sewers in Jackson and Dawson Sts. and Summit Ave. W. F. Erwin, Clk. Bd. Pub. Wks.

WINONA, MINN.—Bids are asked until April 16 for constructing about 67,250 ft. of 8 to 18-in. pipe sewers; average cut about 13 ft., including manholes, flush-tanks, etc.; also for building the ejector chamber, and adjoining manhole; 20-in. iron and stone outlet pipe; two Shone pneumatic ejectors, capacity, 1,000 gallons each, etc. L. D. Frost, Recorder.

BUENA VISTA, COLO.—Reports state that the legislature has passed a bill providing for a sewer system at the state reformatory in this town.

GRASS VALLEY, CAL.—Press reports state plans for a sewer system in this town have been prepared.

SACRAMENTO, CAL.—Wm. Mullenney, Cy. Engr., is preparing plans for a complete sewer system.

GARBAGE DISPOSAL—STREET CLEANING.

AMHERST, MASS.—The question of purchasing a watering cart is under consideration by the town.

ELLIS ISLAND, N. Y. H.—Bids are asked until April 19 for furnishing the labor, material, etc., for constructing a garbage crematory on this island. Dr. J. H. Senner, Comr. of Immigration, Ellis Island.

BROOKLYN, N. Y.—It is stated that Chas. Edgerton, Fidelity Bldg., Philadelphia, Pa., is preparing plans for a garbage crematory in this city for the Brooklyn Sanitary Co.; estimated cost, $150,000.

NEW YORK, N. Y.—Bids are asked until April 26 for building the foundations and superstructure for a steel pocket dump at West 131st St. and the North River. The work will include 200,000 lbs. of steel, iron, 68 piles, etc. Geo. E. Waring, Jr., Comr. Street Cleaning.

SIOUX CITY, IA.—Local papers state that the council will ask for new bids for the city scavenger work. Alderman Tredway, Chn. Health Com.

STREETS AND ROADS.

PORTLAND, ME.—Bids are asked until April 24 for a concrete mixer, stone crusher, engine and boiler, hoisting engine, etc., as stated in our advertising columns. A N. Damrell, Lt.-Col. Engrs.

BOSTON, MASS.—Bids are asked by the Metropolitan Park Commission, 114 Ames Bldg., until April 26, for improving about 2½ miles of the Mystic Valley driveway, in Medford and Winchester, including about 7,000 cu. yds. of grading, etc. Wm. T. Pierce, Engr. Park Comn.——Reports state that plans are being prepared for the proposed boulevard, which is to be 110 ft. wide and to extend from Franklin Park to Edward Everett Sq., where it will connect with Dorchester Way. Wm. Jackson, Cy. Engr.; Benj. W. Wells, Supt. Sts.——The bill appropriating $800,000 for state highways is reported to have been passed by the legislature.

NATICK, MASS.—Reports state that this town has voted $400 for repairing the stone crusher or replacing it.

SPRINGFIELD, MASS.—Reports state that $3,250 will be appropriated for a steam roller and $10,000 for extending Water St. Chas. M. Slocum, Cy. Engr.

STOCKBRIDGE, MASS.—This town has, it is said, appropriated $1,500 for a stone crusher.

WALTHAM, MASS.—The following bids were received April 5 for constructing about 4,430 lin. ft. of gravel roadway: Bartlett & Son (Melrose, all others Waltham), $4,700; McCusker Bros., $3,500; John H. Huzzey, $3,160; Aab & Co. (accepted), $2,940; J. H. Delaney, $2,765.

WEBSTER, MASS.—This town has appropriated $11,000 for macadamizing Main St., according to reports.

HARRISVILLE, R. I.—Bids are asked until April 17 for constructing one or more miles of macadam road. Job S. Steere, Town Clk.

PROVIDENCE, R. I.—This town will, it is said, purchase a steam road roller at an estimated cost of about $3,300. J. H. Shedd, Cy. Engr.

WETHERSFIELD, CONN.—Reports state that this town will spend $5,000 in street improvements.

ALBANY, N. Y.—Bids are asked until May 3 for excavating, filling, forming, curbing and completing sidewalks, house drains, and paving with asphalt blocks on First St. Thos. J. Lanahan, Clk. Bd. Contract.

BROOKLYN, N. Y.—Cody Bros., at $56,906, were the lowest bidders for macadamizing Ocean Parkway, as noted in our issue of April 1.——Bids are asked until April 20 for flagging sidewalks in 7 streets. Theodore B. Willis, Comr. Cy. Wks.

BUFFALO, N. Y.—Bids are asked until April 21 for asphalt paving Niagara, Hayden and Swan Sts. and Broadway. R. G. Parsons, Secy. Bd. Pub. Wks.

BUFFALO, N. Y.—Bids are asked until April 28 for paving Seneca St. and Mills Alley with asphalt or brick. R.G. Parsons, Secy. Bd. Pub. Wks.——E. B. Guthrie, Ch. Engr., has prepared a list of streets to be paved with asphalt this season at an estimated cost of $245,577, including about 107,692 sq. yds.

CATSKILL, N. Y.—The senate has passed a bill authorizing this town to issue $20,000 in bonds for paving Main St. with brick, according to reports. Chas. Van Orden, Cy. Engr.

ELMWOOD PARK, N. Y.—Reports state that the question of paving Cortland Ave. with asphalt is being considered.

FAR ROCKAWAY (L. I.), N. Y.—The contract for improving the streets of this village is said to have been awarded to Edward Roche, proprietor of the Tackapousha Hotel. Over $100,000 will be spent on the improvement.

GREECE, N. Y.—It is reported that this town is to improve its highways. Frank J. Defendorf, Highway Comr.

HIGHLAND FALLS, N. Y.—This town has, it is said, subscribed $10,000 for improving the road from West Point to Montgomery.

ELMIRA, N. Y.—Bids are asked until May 3 for paving and curbing West Church St., from Walnut St. to Hoffman St., as stated in our advertising columns. Thos. Spence, Clk. Bd. Pub. Wks.

NEWTOWN (L. I.), N. Y.—This town voted April 6 to issue $600,000 in bonds for macadamizing streets. Philip Frank, Clk. Bd. Highway Comrs., Winfield, L. I.

NEW YORK, N. Y.—Bids are asked until April 23 for asphalt paving 10 streets. Chas. H. T. Collis, Comr. Pub. Wks., 150 Nassau St.

NEW YORK, N. Y.—Bids are asked until April 26 for asphalt paving on three streets. Chas. H. T. Collis, Comr. Pub. Wks., 150 Nassau St.

NORTH HEMPSTEAD (L. I.), N. Y.—This town voted April 6 to issue $81,000 in bonds for road improvements, and Oyster Bay voted $300,000 in bonds for the same purpose.

RICHMOND HILL (L. I.), N. Y.—At the special election held April 7 it was voted to issue $220,000 in bonds for macadamizing the streets and flagging the sidewalks, as noted in our issue of April 1.

ROCHESTER, N. Y.—The boulevard from Driving Park to the city line is to be improved, at an estimated cost of about $60,000, according to reports. Edwin A. Fisher, Cy. Engr.

SING SING, N. Y.—Bids were asked until April 14 for building 1¾ miles of telford macadam road, paving gutters, laying drain pipe, building catch basins, retaining walls, stone culverts and bridge on estate of V. Everit Macy. Edmund K. Brown, Engr.

BLOOMFIELD, N. J.—This town has appropriated $10,000 for road improvements, $1,000 for stone gutters and $2,000 for sidewalks, according to reports.

CAMDEN, N. J.—Bids are asked until April 21 for constructing about three miles of telford and macadam road, as described in our advertising columns; bond, $7,000. Harry T. Wolfe, Dir. Bd. Freeholders.

RAHWAY, N. J.—The board of freeholders has, it is said, decided to widen and macadamize the road between St. George's Ave. and the county line. J. F. Hubbard, Dir. Bd.

ALLEGHENY, PA.—D. L. Fulton, Supt. Bureau of Highways and Sewers, informs us that this city will repave about 157,000 sq. yds. of streets this season at an estimated cost of $275,000. About $40,000 will also be spent for constructing lateral sewers.

BEECH CREEK, PA.—This town will, it is said, purchase a stone crusher. Joseph Hubbard may be addressed.

BETHLEHEM, PA.—Reports state that an election will soon be held to vote on the question of issuing $75,000 in bonds for macadamizing the streets. R. E. Neumeyer, Borough Engr.

BRADFORD, PA.—Bids are asked until May 3 for about 18,000 sq. yds. of brick paving in three streets, as stated in our advertising columns. Jas. A. Lindsey, Cy. Clk.; Peyton B. Winfree, Cy. Engr.

EASTON, PA.—Bids are asked until April 29 for paving part of Central Square and Fourth St. with brick, as stated in our advertising columns, and until April 29 for a steam road roller. H. R. Fehr, Cy. Engr.

FRANKLIN, PA.—Bids are asked until April 15 for about 7,954 sq. yds. of brick paving and for constructing about 2,600 ft. of 18 to 24-in. pipe sewer. Wilson & Kuhn, Borough Engrs., Johnstown, Pa.

READING, PA.—Reports state that this city has voted to issue $600,000 in bonds, two-thirds of which is to be used for street paving. Edward Chamberlain, Cy. Engr.

WHEELING, W. VA.—The county commissioners will, it is reported, purchase a stone crusher at an estimated cost of about $900.

MERIDEN, MISS.—Bids are asked until May 7 for about 15,000 sq. yds. of brick paving on concrete and about 30,000 sq. yds. of paving with chert, as stated in our advertising columns. E. H. Dial, Mayor; I. A. Mooser, Cy. Clk.

FORT WAYNE, IND.—Reports state that a petition is being circulated for the brick paving of High St., from Wells St. to St. Mary's Ave. F. M. Randall, Cy. Engr.

WAUKESHA, WIS.—The board of public work has purchased a 14-ton steam road roller of the O. S. Kelly Co., for $3,250. Wm. Powrie, Cy. Engr.

FARMINGTON, MO.—About $10,000 will be spent for road improvements, according to reports.

KANSAS CITY, MO.—Eighteenth, Tracy and 11th Sts. are to be paved with asphalt, according to reports.

GALVESTON, TEX.—The council has instructed the board of public works to advertise for bids for constructing a roadway from Avenue H to the beach, at an estimated cost of about $6,800.

GRASS VALLEY, CAL.—The board of trade has decided to purchase a stone crusher, according to reports. J. F. Colley, Secy.

MANUFACTURING PLANTS.

CLINTON, MASS.—The Lancaster Mills Co. is said to be planning for a number of improvements to its plant. On account of the removal of the dam across the Nashua River steam, instead of water, will have to be used to furnish power. This will necessitate the erection of half a dozen boilers, a chimney 285 ft. high, etc. Geo. P. Taylor may be addressed.

LANCASTER, MASS.—Press reports state that the Jackson Mfg. Co. has begun the construction of a new steam plant at this place.

OLNEYVILLE, R. I.—Press reports state that the Union Company has purchased the Merino mills for a Massachusetts party, who will put in improved machinery, etc.

PENFIELD, N. Y.—James Stewart & Co., Buffalo, N. Y., and St. Louis, Mo., have been awarded the contract for constructing new carshops for the Merchants' Despatch Co. at a cost of $118,370, according to reports. The shops will cover 12 acres and will consist of a carshop 170 × 302 ft.; a planing mill, 86 × 142 ft.; machine shop, 86 × 150 ft.; power house, 118 × 39 ft.; a general supply building, 45 × 245 ft.; an office building, 60 × 100 ft.; railway station, 80 × 200 ft., and transfer table, 12 × 232 ft. Gen. Supt., J. W. Musson, Granite Bldg., Buffalo.

POUGHKEEPSIE, N. Y.—The plant of the Poughkeepsie Glass Works was destroyed by fire April 9, causing a reported loss of about $100,000; insurance, $90,000.

WATERTOWN, N. Y.—The Noye Mill Furnishing Co., Buffalo, N. Y., is said to have been awarded the contract for making important repairs to the flour mill of I. A. Graves & Co.

PATERSON, N. J.—M. Houman, 2 Crosby Place, Paterson, is preparing plans for an additional story to the 3-story factory of F. Harding, Paterson. The building is 40 × 100 ft. and 36 × 54 ft., the addition to which will cost about $6,000.

POTTSTOWN, PA.—The construction of a coffin factory in this place is being considered by J. Mengle Fisher and J. F. Althouse.

WILLIAMSPORT, MD.—Work has been begun on the site of 17 acres for the Mercersburg Tannery Co.'s plant, which is to be moved to this place from Mercersburg, as noted in our issue last week. W. E. Byron & Son may be addressed.

CARROLLTON, GA.—The Carroll Cotton Mills, incorporated recently with a capital stock of $300,000, is said to be making arrangements for the construction of its mills. L. C. Mandeville, C. W. J. Stewart and J. B. E. Brown are interested.

HAZELHURST, MISS.—It is said that the new ice plant belonging to Gerard, of Hazlehurst, and W. J. Rhodes, of New Orleans, was destroyed by fire April 2. The plant will be rebuilt at once.

MARIETTA, GA.—D. E. Yale, Cannon Falls, Minn., and Marietta, is reported as about to put a certain amount of new machinery in the knitting plant recently purchased from G. K. Cooper. J. H. Barnes, Marietta, is also interested.

MONTGOMERY, ALA.—The Montgomery Cotton Mills Co. is reported as considering the question of doubling the capacity of its mills, which now contain about 3,015 spindles.

CHATTANOOGA, TENN.—J. L. Conner, 409 High St., Chattanooga; C. V. Payne and others are interested in a proposed plant for this city to manufacture boat oars, baseball bats, poles, etc. A company will probably be organized with a capital stock of $50,000.

CLEVELAND, O.—The Otis Steel Co. is reported as making improvements to its plant at a cost of about $250,000. It is said that it is also proposed to erect additional furnaces, etc.

ST. LOUIS, MO.—Estimates are reported as being secured for a flour mill in North St. Louis for the Whitney Mfg. Co., Calvary Ave., near Broadway; estimated cost, $150,000. Pres., John B. Buss.

BAKER CITY, ORE.—W. H. Shoemaker is said to be about to construct a flour mill on Rock Creek.

OREGON CITY, ORE.—The plant of the Crown Paper Co. will be enlarged to about 40% of its present capacity.

GAS PLANTS.

CONCORD, MASS.—The people of this place have recently voted to light the town by gas or electricity, according to reports.

HORSEHEADS, N. Y.—Bids are asked until April 20 for furnishing supplies for 100 street lamps for one year. Edward M. Myers, Town Clk.

PITTSBURG, PA.—The committee has recommended that a franchise be granted to the Electric Gas Mfg. Co. The capital stock of the company will be increased from $1,000 to $1,000,000, as soon as the councils grant the franchise. Work will be begun in about 90 days. Pres., M. B. Cutter, B. & O. R. R. Co., Pittsburg; Secy., J. R. Washington.

RICHMOND, VA.—Press reports state that a proposition is to be submitted by John D. McIlhenny and others of Philadelphia, for the contract of the Richmond gas works. The proposition contemplates guaranteeing a specified sum a year for an agreed period for the plant.

NEW COMPANIES.—People's Gas Co., Carbondale, Pa., $5,000, with $500 paid in; to manufacture and sell gas. Treas., J. W. Morris, Wilkes Barre, Pa.

Kansas City Gas Co., Kansas City, Mo.; $5,000,000. Hugh J. McGowan, Joseph Bushnell, Geo. S. Clarke and others.

Standard Incandescent Gas Light Co., New York, N. Y.; $20,000; to manufacture lamps, lighting apparatus, etc.; Theodore Tietz, 437 Broadway; Harry Jennings, Samuel Bernheim, John J. Kaut, Henry Hollies, New York.

Standard Gas Co., Whitewater, Wis.; $60,000; C. E. and T. W. Gray and Fred Beach, Whitewater; O. H. Fethers and M. G. Jeffris, Janesville.

Delaware & Mount Brydges Oil and Gas Co., Delaware, Ont.; $10,000; to explore for petroleum; Henry Johnston, Frank Haycroft, John McEwen and John Ackland Miller, Delaware.

McCormick Oil Co., Greenville, Pa.; to operate oil and gas wells; Pres., J. L. Riley; Gen. Mgr., J. M. McCormick; Secy., John B. Chase; Treas., Alexander Bright.

MISCELLANEOUS CONTRACTS.

CHEMICAL ENGINE.—Downingtown, Pa.—The question of purchasing a chemical fire engine is under consideration.

PARK.—Tarrytown, N. Y.—Work is said to have been begun on a park of 2,000 acres at Kaakout for John D. Rockefeller, of New York.

STREET SIGNS.—Brooklyn, N. Y.—Bids are asked until April 22 for furnishing and placing street signs; surety, $1,250. Theo. B. Willis, Comr. Cy. Wks.

UNDERGROUND WIRING.—Topeka, Kan.—John R. Mulvane, Pres., proposes to put underground the wires of the telephone company at a cost of over $50,000.

TELEPHONE SYSTEM.—Minneapolis, Minn.—A. H. Hazen and G. C. Hubbinger, of the Mississippi Valley Telegraph Co., are trying to secure a franchise in this city.

TELEPHONE LINE.—North Tarrytown, N. Y.—The Westchester Ave. Telephone and Telegraph Co. has been granted permission to construct its line in this place.

TELEPHONE SYSTEM.—Norfolk, Va.—The council has granted a franchise to the American Telephone & Telegraph Co.; bond, $50,000. Gen. E. P. Meaney is interested.

BONDS.—Galveston, Tex.—Bids are asked by the county commissioners until April 23 for the purchase of $280,000 of county court house bonds. County Treasurer Waters may be addressed.

TUNNEL.—Pittsburg, Pa.—The Pittsburg Tunnel Co. has been incorporated to construct and operate a tunnel in this city. R. A. Carter, W. C. Johnston and A. M. Neeper are interested.

WIRE, RIVETS, ETC.—Washington, D. C.—Bids are asked until May 6 for furnishing wire, rivets, drills, nuts, etc., for the postoffice department. Jas. A. Gary, Postmaster-Gen., Washington.

DREDGING.—Portland, Me.—Bids are asked until April 29 for dredging in Portland Harbor, as stated in our advertising columns. Lt.-Col. A. N. Damrell, U. S. Engr., 537 Congress St., Portland.

CANAL WORK.—Ottawa, Ont.—It is reported that bids are being asked by the department of railways and canals for enlarging two sections of the Edwardsburg Canal. The work must be completed by Jan. 31, 1899.

PIPE LINE.—Lewiston, Wyo.—It is stated that the owners of the Oregon-Butte Placers, about 22 miles from this place, propose to build a pipe line 22 miles long, at a cost of about $125,000. E. A. Greene will have charge of the work.

TELEPHONE SYSTEM.—Bay Side (L. I.), N. Y.—The Bay Side Telephone & Construction Co. is reported to have been granted consents to construct a line in this place. Pres. and Gen. Mgr., James Stretch; Secy. and Treas., A. W. Allen.

TELEPHONE SYSTEM.—Sunbury, Pa.—The Penn Telephone Co. has been organized to build a system from Sunbury to Lewistown, by way of Northumberland, Snyder and Mifflin counties. A. W. Potter and C. M. Clements are interested.

FILLING.—Tompkinsville (S. I.), N. Y.—Bids are asked until April 21 for filling about 10,000 cu. yds. behind the bulkhead wall at the light house station, as stated in our advertising columns. Lt.-Col. D. P. Heap, U. S. Engr., Tompkinsville.

PARK.—Pittsburg, Pa.—Work of beautifying Highland Park has been begun. There will be required about 150,000 trees, besides fences, etc. About 300 laborers will be put to work. Geo. W. Burke, Asst. Supt. of Parks; E. M. Bigelow, Dir. Pub. Wks.

REMOVING WRECK.—New York, N. Y.—Bids are asked until May 1 for removing the wrecked steamship "Ailsa," lying in the main ship channel, as stated in our advertising columns. Lieut.-Col. Wm. Ludlow, U. S. Engr., Army Bldg., New York.

RAILWAY TIES.—St. Louis, Mo.—Bids are asked until May 15 for furnishing ties to the Missouri Pacific and St. Louis, Iron Mountain and Southern Ry. Cos. for five years, beginning Jan. 1, 1898. N. T. Spoor, Agent, Equitable Bldg., St. Louis; W. B. Doddridge, Gen. Mgr.

BOILER, ENGINE, CARS, ETC.—Portland, Me.—Bids are asked until April 24 for furnishing a concrete mixer, stone crusher, hoisting engine and boiler, dump cars, etc., as stated in our advertising columns. Lt.-Col. A. N. Damrell, U. S. Engr., 537 Congress St., Portland.

LANDSCAPE WORK.—Omaha, Neb.—Rudolf Ulrich, Landscape Artist, New York, is reported to have been engaged to design the landscape features of the grounds for the Trans-Mississippi Exposition. R. S. Wilcox and A. Horpe, Jr., are interested in this portion of the work.

TELEPHONE SYSTEM.—San Francisco, Cal.—Local papers state that work will be begun on the lines and conduits for the People's Mutual Telephone Co. early next month. By the agreement of the franchise the company must do at least $100,000 worth of work within a year.

STONE WALL.—Williamsport, Md.—The Chesapeake & Ohio Canal Co., it is stated, will expend about $25,000 in the construction of a stone wall on the West Virginia bank of the Potomac River, at dam No. 6, to close up the breach in the bank which was made by the high water in February.

TUNNEL.—New York, N. Y.—The Rapid Transit Underground R. R. Co. has been incorporated to operate an underground railway in this city to be 10 miles long; capital stock, $100,000. The incorporators are said to be Carlton H. Reeve, New York; Nelson S. Easton, Summit, N. J.; John Bogart, 50 Wall St., New York; John F. O'Rourke, 53 W. 85th St., New York.

STEAMSHIP SUPPLIES.—Cleveland, O.—It is reported that the Bessemer Steamship Co. is receiving estimates for furnishing ship machinery, tools, castings, electric supplies, etc. Gen. Mgr., L. M. Bowers.

TELEPHONE SYSTEM.—Warren, Ark.—Councilman W. J. Savage writes us that he understands that a company is being organized to build a telephone system in this place. It will probably be quite a large system. The company wishes to correspond with manufacturers of wire, etc.

PIER.—Philadelphia, Pa.—The Philadelphia & Reading Ry. Co. is reported to have completed plans for a new pier below its ferry house. The pier will be 560 ft. long and 80 ft. wide and a number of buildings will be erected thereon. Plans are also being prepared for a new ferry house and slip.

CANAL WORK, ETC.—Chicago, Ill.—Bids are asked until June 3 for constructing about eight miles of the eastern section of the Illinois & Mississippi Canal, constructing foundations for two aqueducts and 11 locks, concrete arch culverts, etc., as stated in our advertising columns. Maj. W. L. Marshall, U. S. Engr., 1637 Indiana Ave., Chicago.

PIERS.—New York, N. Y.—The department of docks has adopted resolutions authorizing the chief engineer to prepare plans for nine new piers between West Washington Market and West 23d St. The piers will be 800 × 80 ft. and are estimated to cost, with land damages, about $10,000,000. Geo. S. Terry, Secy., Pier A.

CANAL.—New York, N. Y.—Press reports state as follows: Senator Platt, of New York, has introduced a bill authorizing the secretary of war to contract with Charles Stoughton for the construction of the Harlem Kills Canal to connect the lower Harlem River with Long Island Sound, and appropriating $1,296,000 for the work.

REFRIGERATING PLANT.—New York, N. Y.—The following submitted bids this week for installing a refrigerating plant in the aquarium in Castle Garden building:

Wright Steam Engine Wks., Newburg, N. Y.	$4,900
Newburgh (N. Y.) Lake Machine & Engine Co.	4,900
De La Vergne Ref. Machine Co., New York	8,825

PIER, ELEVATOR, ETC.—Panama, Columbia.—Press reports state that the Panama R. R. Co. has awarded contracts for constructing a pier and making other improvements to Panama Harbor, at a cost of about $1,000,000. Other improvements to cost about $700,000 are contemplated. Pres., J. Edward Simmons, 29 Broadway, New York, N. Y.; Ch. Engr., G. R. Tuska, New York; Supt., J. R. Shaler, Colon, Colombia.

GOLD MINING.—Georgia.—The Appalachian Gold Mining Co., of Atlanta, last week decided to build at once a chlorinating plant sufficient to treat the product of seven stamp mills, which the company now has in operation at the mines. Additional shafts were ordered sunk on some of the company's mines, and additional machinery will be purchased. C. James, of Chattanooga, has secured the contract for the chlorination plant.

TUNNEL.—Aspen, Colo.—It is reported that work on the Newman tunnel is soon to commence. This is situated on the Castle Creek side of West Aspen Mountain. The tunnel will cut the Little Percy vein at a depth of 2,000 ft. The line of the tunnel will run a little north of the Mayflower, Saddle Rock and Mackey and Julia mines, and drifts will undoubtedly be run so that these properties can be worked through the tunnel.

MINING, ETC.—Hazelton, Pa.—Press reports state as follows: G. B. Markle & Co. will begin active work April 11 at the Ebervale and Harleigh mines, which were drowned out about 15 years ago, and to recover which the Jeddo tunnel was driven. It is the intention of the company to strip the veins between Harleigh and Ebervale. As soon as the necessary excavations can be made there will be 20 years' work available for about 1,000 men.

DOCKS, DREDGING, ETC.—Perth, Western Australia.—Press reports state as follows: The Western Australian Government has decided to spend $32,500,000 in carrying out various public improvements in this colony. C. Y. O'Connor, Ch. Engr., Perth, is at present in England getting advice in connection with the construction of water works at Coolgardie to cost $12,500,000. Of this amount over one-half will be used in purchasing pipe, pumps and other machinery. It is anticipated that the bids will be issued in a few weeks' time, and whether any foreign manufacturers will be allowed to bid for the materials, etc., has not yet been decided upon. Mr. O'Connor has also been instructed, it is said, to obtain advice on the general management of railway workshops, the government having decided to spend about $1,000,000 on such workshops. At Freemantle the dredging is to cost some $500,000, and a dock 600 ft. long, 80 ft. broad and 33 ft. deep is also to be made. All this work and material has not yet been contracted for.

PNEUMATIC TUBE.—New York, N. Y.—A dispatch to the "Tribune" from Washington states as follows: The government has closed a contract with a company of Eastern capitalists, represented by John E. Milholland, of New York, for the operation of a system of pneumatic tubes in New York city, running from Station H, the 44th St. branch, to the general postoffice, and thence southerly to the Produce Exchange station. The contract price is nearly $150,000 a year, and the contract, under certain conditions, is to run for four years. The system is to be in operation by October. This is only part of a scheme of the postoffice department, which eventually will envelop all New York, so far as its postal branches are concerned, with the pneumatic tube system, which by experiments already made in New York and Philadelphia has been demonstrated to be feasible and practicable in expediting the mails. The tubes are to be of a 7-in. size, with a capacity for 600 ordinary letters in each carrier, the carriers being transmissible every 40 seconds if necessary. The estimated time of running between 42d St. and the postoffice is 7 minutes. The carriers will be so constructed as to stop at the various postal stations between the terminal, where the mail can be again sorted and forwarded immediately.

CONTRACT PRICES.

REPAIRING ASPHALT PAVEMENTS.—Buffalo, N. Y.—The following bids were opened April 6 for repairing asphalt pavements and constructing and repairing side and crosswalks:

Items.		Asphalt Paving Cos. Barber.	Standard.	German Rock.
Resurfacing, ...	per sq. yd.	$1.46	$1.48	$1.51
Skimming	" "	.98	1.01	1.01
Replacing concrete	" "	2.39	2.40	2.42
Scraping joints, ...	per lin. ft.	.04	.04½	.03
Cleaning cracks ...	" "	.02	.02½	.01
Replacing stone ...	" "	.19	.21	.19

For constructing wood sidewalk W. H. Fitzpatrick bid 17¾ cts. a lin. ft., exclusive of excavations, and for constructing crosswalks, 25 cts.; Robt. F. Hankin bid 17½ cts. for sidewalks and 25 cts. for crosswalks, a lin. ft., and exclusive of excavations; McDonough & Eustes bid 18 cts. for sidewalk construction and 28 cts. for crosswalk construction.

ASPHALT PAVING.—Hartford, Conn.—The following bids were received April 7 for paving Main St., between Needham's corner and the tunnel with asphalt, according to reports in local papers:

Bidder.	Cement. Rosendale.	Portland.
Hartford Paving & Construction Co.	$2.40	$2.52
Trinidad Asphalt Refining Co.	2.63	2.85
Metropolitan Pavg & Construction Co	2.65	2.95
Warren-Scharf Asphalt Paving Co.	2.57	2.86
Southern New England Paving Co.	2.49	2.70

LAYING WATER MAINS.—Boston, Mass.—The metropolitan water board has awarded contracts 58, 59 and 60, as advertised in Engineering News, as follows: Contract No. 58, H. A. Hanscom & Co., West Medford, Mass., $34,756; No. 59, Chas. A. & Chas. E. Trumbull, Lawrence, Mass., $6,619; No. 60, The Chas. H. Eglee Co., Boston, $60,865. The itemized bids for the latter contract were as follows:

Bids for Laying Water Pipes, Metropolitan Water-Works, Contract No. 60, Boston, Mass.

Quantities.		C. A. & C. E. Trumbull, Lawrence.	C. H. Eglee Co., Boston.	H. A. Hanscom & Co., West Medford.	J. F. O'Brien, & Co., Boston.	A. W. Bryne Constn Co., W. Medford.	D. F. O'Connell, Boston.	S. W. Fresselin, Reading, Pa.	C. G. Crailb, Winthrop.	Snyder & Williams, Dayton, O.	J. J. Newman, Barrington, R. I.
Laying cast-iron pipe:											
48-in.	12,000 lin. ft..	$1.60	$2.37	$2.30	$2.08	$2.25	$2.24	$2.00	$2.50	$2.95	$3.34
42-in.	8,000 " "	1.30	1.84	2.30	1.90	2.00	2.10	1.91	2.50	2.70	3.30
24-in., for connections	60 " "	2.10	1.00	1.00	1.50	1.25	1.25	1.00	1.15	1.50	2.50
20-in., " "	75 " "	2.00	.90	1.00	1.50	1.10	1.15	.75	1.10	.75	2.25
16-in., blw-ofs & cons.	40 " "	1.75	.75	1.00	1.00	1.00	1.00	.70	.75	.60	.95
12-in., " "	180 " "	1.60	.60	.50	.60	.60	.80	.60	.75	.50	.95
8-in., for connections	20 " "	1.50	.50	.50	.60	.60	.70	.50	.50	.45	.75
4-in., drain'g chmbrs	130 " "	.75	.40	.50	.50	.50	.60	.40	.50	.50	.90
Rock excav., abv grade.	660 cu. yds.	2.75	3.50	2.00	5.50	3.00	3.50	2.50	4.00	3.00	3.75
Rock excav., blw grade	15 " "	5.00	5.00	4.00	10.00	4.00	7.00	3.50	5.00	4.00	4.00
Earth excav., blw grade	240 " "	1.00	.75	2.00	1.50	.60	1.25	1.00	.50	1.50	1.25
Setting air valves	13 each...	3.50	3.00	3.00	3.00	5.00	5.00	10.00	3.50	2.50	5.00
Chambers for 36, 24 and 20-in. valves	13 " ...	70.00	60.00	60.00	70.00	50.00	75.00	75.00	75.00	35.00	98.00
Blow-offs, by-passes & air valves	26 " ...	40.00	40.00	30.00	30.00	35.00	40.00	50.00	45.00	25.00	45.00
Spruce piles, drvn., etc.	22,500 lin. ft..	.18	.20	.18	.30	.30	.19	.40	.20	.27	.20
Lumbr, in place, trnch	32 M. ft...	30.00	28.00	30.00	30.00	30.00	26.00	35.00	35.00	25.00	30.00
Furnishing and laying:											
12-in. sew. p., in cradle	675 lin. ft..	1.80	1.30	1.45	1.70	1.60	1.65	1.45	1.20	1.55	2.15
12-in. " surf. dr.	210 " "	.70	.75	1.00	1.20	.75	.90	.85	.85	.85	1.70
10-in. " in cradle	1,525 " "	1.60	1.16	1.30	1.50	1.50	1.47	1.30	1.10	1.40	2.05
10-in. sewer pipe	220 " "	.75	.86	1.00	1.00	.75	.94	.80	.84	.80	1.60
8-in. sew. p., in cradle	630 " "	1.50	.90	1.40	1.00	.70	1.37	1.20	.90	1.20	1.90
6-in. sewer pipe	250 " "	.52	.50	.75	1.00	.65	.80	.75	1.00	.50	1.15
Sewer manholes	10 each...	35.00	30.00	40.00	40.00	35.00	35.00	50.00	50.00	45.00	40.00
Catch basins	7 " ...	25.00	45.00	50.00	45.00	60.00	45.00	80.00	40.00	47.00	40.00
Concrete masonry	400 cu. yds.	5.75	6.00	5.50	5.00	5.00	4.50	6.00	5.00	7.00	5.90
Rebldg retaing walls, Spot Pond Brook		450.00	200.00	200.00	600.00	650.00	814.00	800.00	200.00	550.00	145.00
Rebuilding culvert, 2d St., Everett....		300.00	420.00	400.00	700.00	400.00	467.00	700.00	300.00	450.00	975.00
Total		$48,274	$60,865	$63050	$63,177	$63,240	$63,524	$64,570	$68,235	$77,038	$89,200

BRIDGE SUBSTRUCTURE.—Youngstown, O.—David M. Wise, Engr., writes us that the contract for the substructure of the Springs Common bridge has been awarded by the county commissioners to Christ. Mauser; bids were as follows:

Bidder.	Masonry, P. cement, 1,500 cu. yds. German	American.	Concrete, 240 cu. yds. German	American.	Excavation, 2700 c. yds	Old stone, will allow 100 c. yds	Timber, per M. ft.
Christ. Mauser[1]	$7.40	$6.90	$5.00	$4.25	$0.25	$4.00	$25.00
L. H. Young[2]	8.00	7.85	7.75	8.25	1.45	1.75	24.00
H. Neidermeier[3]	8.95	8.60	5.00	4.25	.50	3.00	25.00
Spallacy, Mayer & Carlisle[4]	7.20	7.00	5.50	5.00	1.00	2.00	24.00
C. H. Connell[4]	6.75	6.50	6.00	5.00	.70	2.50	25.00
Williams Bros.[5]	6.75	6.45	6.40	5.20	.32	2.00	25.00
George Bode[1]	7.20	7.05	5.70	4.95	1.70	3.00	25.00
Mitchel Cnstn Co[6]	6.75	6.50	6.50	6.00	.45	3.00	40.00
J. Malloy & Son[7]	7.48	6.95	5.50	5.00	.49	2.60	30.00
Harris Constn Co[4]	8.05	7.80	6.56	6.30	1.40	2.50	25.00

[1]Youngstown, O. [2]Ohltown, O. [3]Newton Falls, O. [4]Pittsburg, Pa. [5]Willoughby, O. [6]New Castle, Pa. [7]Cincinnati.

HARBOR IMPROVEMENTS.—Dunkirk, N. Y.—Maj. T. W. Symons, U. S. Engr., Buffalo, received the following bids March 22 for improving Dunkirk harbor:

Bids Received March 22, 1897, for Improving Harbor at Dunkirk, N. Y.

Quantities.		John B. Breymann, Toledo, O.	Carkin, Stickney & Cram, Detroit.	W. J. Daly, Ogdensburg, N. Y.	Edw. J. Hingston, Buffalo, N. Y.	L. P. & J. A. Smith, Cleveland, O.	Sullivan & Churchyard, Buffalo, N. Y.	Rider & Fitzgerald, Dunkirk, N. Y.
Channel and harbor excavation:								
Dredg. & removing, place meas.	550,000 cu. yds.	$0.50	$0.57	$0.42½	$0.42	$0.49	$0.41	....
Repairs to West Pier:								
Removing old superstructure,..	680 lin. ft..	....	3.00	....	13.90	4.00	2.20	2.00
Concrete in place	2,800 cu. yds.	....	6.25	....	6.69	6.30	5.75	6.57
Breakwater, Channel Arm and Extension:								
Dredging, foundation, scow meas.	8,700 cu. yds.	....	.48½	....	.20	.55	.25	....
Remov'g old breakwater, entire..	60 lin. ft..	....	1,000.00	....	800.00	600.00	800.00	....
Fndatn stone in place, scow meas.	3,400 cu. yds.	....	1.40	....	1.19	1.50	1.30	....
16-ft. timber crib, complete....	162 lin. ft..	....	70.00	....	62.89	80.00	64.00	....
8-ft. " " "	440 " "	....	55.00	....	56.93	49.00	48.00	....
10-ft. " " in place.....	150 " "	....	15.00	....	15.50	14.30	15.00	....
6-ft. " " "	160 " "	....	10.00	....	10.42	9.32	8.50	....
White pine posts and stringers..	12,648 B.M. ft.	....	30.00	....	28.50	30.00	30.00	....
Filling stone, brkwtr ext., in place	4,300 cu. yds.	....	1.40	....	1.19	1.40	1.20	....
Concrete in place	1,260 " "	....	6.25	....	6.73	7.00	6.90	....
Manhole covers	12 each...	....	8.00	....	14.00	10.00	14.00	....
Total, channel and harbor excavation		$275,000	$313,500	$233,750	$231,000	$269,500	$225,500	.....
Total, repairs to West Pier		....	19,540	....	28,184	20,360	17,596	$19,756
Total breakwter channel arm and extension..		....	63,740	....	60,103	63,981	57,324	....
Total, whole work		....	$396,780	....	$319,287	$353,841	$300,420	....

LAYING WATER PIPES, ETC.—Amherst, Mass.—Leonard Metcalf, Engr., informs us that the contract for laying 6,468 ft. of 6-in. and 1,740 ft. of 4-in. water pipe and constructing a small reservoir for the Massachusetts Agricultural College, as advertised in Engineering News, has been awarded to F. A. Cadwell, New Britain, Conn., at the following prices: 6-in. pipe, at 19 cts.; 4-in., 17 cts.; setting hydrants, $3; rock excavation, $2.50; extra labor per hour, 15 cts.; stripping, 35 cts.; subsoil, 35 cts.; brick, per M., laid, $15; concrete, $7; overflow, 40 cts.; grading, old wall taken down, etc., no charge. There were 28 bids.

CAST-IRON PIPE.—Boston, Mass.—Contracts for furnishing water pipe, as advertised in Engineering News, have been awarded by the metropolitan water board as follows: Contract No. 61, Camden Iron Works, $37 a ton of 2,000 lbs. for 450 tons of 14-in. and larger pipe, and $47 a ton for 40 tons of special castings; contract No. 62, Warren Foundry & Machine Co., 50 tons of special castings, 12-in. and smaller, $36.50 a ton of 2,000 lbs.; contract No. 63, Addyston Pipe & Steel Co., 1,270 tons of 48-in., 1,210 tons of 36 to 12-in. pipe and 1,300 tons 48½-in. pipe 1-in. thick, all at $16.75 a ton of 2,000 lbs.

CAST-IRON PIPE.—Brooklyn, N. Y.—The lowest bid received April 6 for furnishing 1,450 tons of 20 to 4-in. water pipe, as advertised in Engineering News, was that of the Addyston Pipe & Steel Co., at $18.48 a ton of 2,240 lbs.; special castings 1.67½ cts. a lb.

ASPHALT PAVING.—Utica, N. Y.—The Warren-Scharf Asphalt Paving Co. has been awarded five contracts for asphalt paving, aggregating about $40,000, its bid for the largest contract being as follows: Tile drains, 10 cts. a lin. ft.; resetting curb, 10 cts.; new curb, and setting, 10 cts.; catch basins, $25 each; branch pipe, straight, 40 cts. a lin. ft.; branch pipe, curves, bends, and branches, 75 cts. each; paving, $1.51 a sq. yd.; repaving, cobble and other stone, 23 cts. a sq. yd.; relaying crosswalks, 3 cts. a sq. ft.; new sandstone crosswalks, back of curbs, 14 cts. a sq. ft.; manholes, $35 each; concrete extra for foundation, $5 a cu. yd.; moving catch basins and new top, $13 each; manholes remodeled, $3 each; total, $12,304.

DREDGING.—New York, N. Y.—Maj. H. M. Adams, U. S. Engrs., received the following bids April 2 for dredging in New Jersey, as advertised in Engineering News:

Bidders.	Matawan Creek. cu. yd. (prism)	Elizabeth River. cu. yd. (prism)	Keyport Harbor. cu. yd. (scow)
Jas. McSpirit, Jersey City, N. J.	$0.18¾	$0.34	$0.21
Edward M. Payn, Albany, N. Y.	.65	1.25	....
Alonzo E. Smith, Islip, N. Y.	.29½	.49 9-10	.25
Wm. H. Taylor, Jr. Jersey City, N. J.	....	....	.18
Kaufman Simon, 181 B'd'way, N. Y.	.17	.17	....

CAST-IRON PIPE.—Newark, N. J.—Morris R. Sherrerd, Engr. Water Dept., writes us that the following bids were received April 8 for furnishing (1) 690 gross tons 4 to 10-in. coated cast-iron pipe, (2) 382 gross tons 12 to 20-in. pipe, and (3) 100,000 lbs. special castings for 4 to 20-in. pipe, as advertised in Engineering News; all f. o. b. cars Newark:

	1.	2.	3.	Total.
Anniston Pipe & Fdry Co.	$20.75	$20.20	$0.02	$23,204
McNeal Pipe & Fdry Co.	18.70	18.70	.01⅞	21,173
M. J. Drummond (accepted)	18.70	18.20	.01⅞	20,732
Fox & Engel	19.04	19.04	.02	21,640
Addyston Pipe & Steel Co.	19.40	19.00	.01⅞	21,618
Warren Fdry & Machine Co	19.20	18.80	.01⅞	21,412
Camden Iron Works	18.95	18.45	.01⅞	21,115

ROAD WORK.—Newark, N. J.—Bids were opened April 7 by the committee on roads and assessments of the board of freeholders for the paving of South Orange Ave., from

THE ACME POWDER CO.,
MANUFACTURERS OF EXPLOSIVES,
806 DUQUESNE WAY, PITTSBURG, PA.

EXPLOSIVES

ARTHUR KIRK & SON,
PITTSBURG, PA.
Powder, Dynamite, Rock Drills, Air Compressors, Rock Breakers, Safety Fuses, Electric Batteries, Miners' Squibs.

Chimney Tops. KENNEDY-KILING & CO. SEWER PIPE 150 FRANKSTOWN AVE PITTSBURG, PA. Flue Linings.

Columbus Office: 812 North High St.

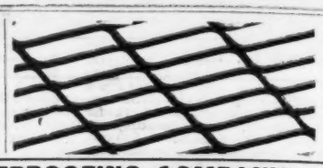
COLUMBUS SEWER PIPE CO. COLUMBUS, OHIO.

Quality Unsurpassed. Write for Prices.
Chicago Office: 616 Chamber of Commerce.

FOR INFORMATION ABOUT
U. S. MAIL CHUTES
WHICH ARE
A necessity in Office Buildings and Hotels, write to the sole makers,
THE CUTLER MFG. CO., ROCHESTER, N.Y
PATENTED. AUTHORIZED.

NATIONAL HOTEL,
Cor. 6th St. and Pennsylvania Avenue, Washington, D. C.
Under new management, and entirely renovated from top to bottom. Steam heat, electric lights and new plumbing throughout. Opposite Pennsylvania Depot. Special attention paid to commercial travelers.
Rates: American plan, $2.50 per day up. European plan, $1.00 per day up.
WALTER BURTON, Manager. O. G. STAPLES, Proprietor.

EXPANDED METAL.
PITTSBURGH, 531 Wood Street.
NEW YORK, 256 Broadway.



STEEL LATH
For Plastering, Fireproofing, Beams, Columns, Partitions, etc.

CENTRAL FIREPROOFING COMPANY,
Manufacturers and Contractors for Erection of Hollow Tile and Porous Terra Cotta . . **FIREPROOFING**
No. 874 BROADWAY, NEW YORK. Henry M. Keasbey, President.

GALESBURG VITRIFIED BRICK CO.,
Paving Brick Exclusively... GALESBURG, ILL.

MUNICIPALITIES
Having Contracts To Let should address

T. W. KINSER & SONS,
609-613 Chicago Stock Exchange, Chicago.
SPECIALTIES: Sewers, Water-Works, Paving Railroads, Fills, Excavating and Masonry.

THE T. A. GILLESPIE COMPANY,
Engineers and Contractors.
Manufacturers of
RIVETED STEEL PIPE.
Pittsburg Office: Westinghouse Bldg.
New York Office: Havemeyer Bldg

CONTRACTORS who can take FIRST-CLASS MUNICIPAL BONDS in South and West in payment, and put in WATER-WORKS and ELECTRIC LIGHT Plants, will find it to their interest to correspond with me. I make a specialty of this line. R. B. HALLIGAN, Suite 901, 155 LaSalle St., Chicago.

UTICA PIPE FOUNDRY CO.
CHARLES MILLAR & SON, Selling Agents, UTICA, N. Y.
Cast Iron Pipe and Specials, Hydrants, Gates, Pig Lead, etc. AKRON SEWER PIPE. Lead Pipe. Plumbers' Materials.

EXTENSIBLE SEWER BRACE,
Guaranteed to be the Safest, Most Economical and Most Durable Sewer Brace in the Market.

Send a postal for our latest illustrated catalogue descriptive of this Brace.
THE DUNN MFG. CO. Limited.,
Penn Building, Pittsburg, Pa.

ESTABLISHED 1864 WALDO BROTHERS, BOSTON, MASS. ROSENDALE AND PORTLAND CEMENTS. CONTRACTORS' & MASONS SUPPLIES. Largest Stock in N.E. SEND FOR CATALOGUE. N.E. AGTS. AKRON SEWER PIPE

Proposals for constructing new steel bascule bridge, operating machinery and power plant, piers, retaining walls and power house between Manhattan Avenue, Brooklyn, and Vernon Avenue, Long Island City, over Newtown Creek.

Proposals for constructing new steel bascule bridge, operating machinery and power plant, piers, retaining walls and power house, according to drawings and specifications prepared by John J. McLaughlin, Engineer in charge, and for removing old abutments, will be received by the Joint Bridge Committee of the Board of Aldermen of the City of Brooklyn and the Board of Supervisors of the County of Queens, at the Common Council Chamber, in the City Hall, Brooklyn, New York, at 10 o'clock, on Thursday, the 22d day of April, 1897, at which time and place the bids will be publicly opened by the Chairman of the said Committee, and the contract awarded, as soon as practicable thereafter, to the lowest responsible bidder, who shall be able to furnish satisfactory evidence to the Committee that he has the plant and resources necessary to the fulfillment of the conditions embraced in the specifications and agreement.

Firms of persons bidding will give their individual names as well as the name of the firms, with their addresses.

The right is reserved by the Committee to reject any or all bids.

Any person making an estimate shall furnish the same on a blank to be had from the Secretary, William J. Wassmuth, No. 340 Fulton Street, Brooklyn, N. Y., to be delivered in a sealed envelope to said Committee on or before the day and hour above-mentioned.

All estimates shall state the price for which the whole of the work as set forth in the annexed specifications is to be done.

No estimates will be received unless accompanied by a certified check upon one of the State or National Banks of the Counties of Kings or Queens, or the City of New York, drawn to the order of Herbert G. Taylor, Treasurer of Kings County, or cash, in the amount of Fifteen Thousand Dollars.

Checks to be enclosed in separate envelopes; as each check will be examined before the accompanying proposal is opened.

Such deposits, excepting that of the successful bidder, will be returned upon the awarding of the contract.

The bidder to whom the contract is awarded shall give security in the sum of One Hundred Thousand Dollars, with such sureties as shall be approved by the Joint Bridge Committee, and each proposal shall be accompanied by the consent, in writing, of at least two freeholders or householders in Kings or Queens Counties, or in the City of New York, to the effect that if the contract is awarded to the person making the proposal, they will become bound as his sureties for its faithful performance, and that if he shall omit, fail or neglect to execute the same, will pay to the City of Brooklyn and the County of Queens any difference which it may be necessary to pay to the person to whom the contract may be subsequently awarded.

For details or proposal, specifications, contract and drawings, apply to WILLIAM J. WASSMUTH, Secretary, Joint Bridge Committee, No. 340 Fulton Street, Brooklyn, N. Y., where same are on file. 14-2t

U. S. ENGINEER OFFICE, Pittsburg, Pa., March 18, 1897.—Sealed proposals for constructing SIX LOCKS AND DAMS on Monongahela River, between Morgantown and Fairmont, will be received here until 12 m., April 27, 1897, and then publicly opened. Information furnished on application. R. L. HOXIE, Major, Engrs. 12-4t

BRIDGE WORK.

TO CONTRACTORS.

Proposals for constructing temporary bridge over Newtown Creek, near the site of the Vernon Avenue bridge, between

BROOKLYN AND LONG ISLAND CITY.

Proposals for constructing temporary bridge over Newtown Creek, near the site of the Vernon Avenue bridge, between Brooklyn and Long Island City, according to drawings and specifications prepared by John J. McLaughlin, Engineer in charge, will be received by the Joint Bridge Committee of the Board of Aldermen of the City of Brooklyn, and the Board of Supervisors of the County of Queens, at the Common Council Chamber, City Hall, Brooklyn, at 10 o'clock on the 22d day of April, 1897, at which time and place the bids will be publicly opened by the Chairman of said Committee, and the contract awarded, as soon as practicable thereafter, to the lowest responsible bidder who shall be able to furnish satisfactory evidence to the Committee, that he has the plant and resources necessary to the fulfillment of the conditions embraced in the annexed specifications and agreement.

Firms of persons bidding will give their individual names, as well as the name of the firms, with their addresses.

The right is reserved by the Committee to reject any or all bids.

Any person making an estimate shall furnish the same on a blank to be had from the Secretary of the Joint Bridge Committee, William J. Wassmuth, No. 340 Fulton Street, Brooklyn, N. Y., in a sealed envelope, to said Committee on or before the day and hour above-mentioned.

All estimates shall state the price for which the whole of the work as set forth in the specifications is to be done.

No estimate will be received unless accompanied by a certified check upon one of the State or National Banks of the Counties of Kings or Queens, or the City of New York, drawn to the order of Hubert G. Taylor, Treasurer of Kings County, or cash, in the amount of one thousand dollars.

Checks to be enclosed in separate envelopes, as each check will be examined before the accompanying proposal is opened.

Such deposits, excepting that of the successful bidder, will be returned upon the awarding of the contract.

The bidder to whom the contract is awarded shall give security in the sum of Twenty Thousand Dollars, with such sureties as shall be approved by the Joint Bridge Committee, and each proposal shall be accompanied by the consent, in writing, of at least two freeholders or householders in Kings or Queens Counties, or in the City of New York, to the effect that if the contract is awarded to the person making the proposal, they will become bound as his sureties for its faithful performance, and that if he shall omit, fail or neglect to execute the same, will pay to the City of Brooklyn and County of Queens any difference which it may be necessary to pay to the person to whom the contract may be subsequently awarded.

For details of proposals, specifications, contract and drawings, apply to the Secretary of the Joint Bridge Committee,

WILLIAM J. WASSMUTH,
No. 340 Fulton Street, Brooklyn, N. Y.
14-2t

COUNTY COURT HOUSE.

NOTICE TO CONTRACTORS.

FORT WAYNE, IND.

Notice is hereby given, that sealed proposals will be received by the Board of Commissioners of the County of Allen, Indiana, at Fort Wayne, up to the hour of 2 o'clock p. m., on the 15th day of May, 1897, for furnishing all of the material and doing all the work, including the cartage, tools, tackle and everything requisite for the building of the Court House, Power Station and Tunnel, according to the plans and specifications therefor, prepared by Mr. Brentwood S. Tolan, Architect, which have been adopted by the said Board of Commissioners, and are now deposited and on file in the office of the Auditor of said County.

Copies of said plans and specifications can be found at the offices of Brentwood S. Tolan, Architect, Fort Wayne, Indiana; Pierce & Richardson, Chicago, Illinois, who are Consulting, Electrical and Mechanical Engineers for the Architect; and the Engineering News, New York City.

Copies of full legal notices and blank forms of proposals and of bonds, will be furnished by the Auditor of said County upon request, and all proposals and bonds must be on the form so furnished, and in accordance therewith.

For the building of the Court House, and the doing of the general work included therewith, a bond in the sum of Two Hundred Thousand Dollars ($200,000) will be required.

The right to reject any and all bids is reserved.

By order of the Board of Commissioners of the County of Allen.

M. A. FERGUSON,
J. H. STELLHORN,
S. F. BAKER,
County Commissioners.

Attest:
C. W. EDSALL,
Auditor Allen County, Ind.
Fort Wayne, Indiana, March 31, 1897. 14-4t

U. S. ENGINEER'S OFFICE, 136 Island St., Grand Rapids, Mich., March 29, 1897.—Sealed proposals for PIER EXTENSION at South Haven, Mich., will be received here until 2 p. m., April 27, 1897, and then publicly opened. Information furnished on application. C. McD. TOWNSEND, Capt. Engrs. 13-4t

COUNTY ROAD.

CAMDEN, N. J.

Harry F. Wolfe, Director of the Board of Chosen Freeholders of the County of Camden, hereby calls for bids for the construction of a Telford and Macadam Road, beginning at the northerly side of Collings Road, near Collingswood, at the Knight Park and extending in a northeasterly direction over Brownings Road to the Camden and Moorestown Pike, in the Borough of Merchantville, a distance of two and nine-tenths miles, more or less.

1. All bids shall be in writing.
2. Each bid shall be accompanied with a certified check or cash in the sum of $1,000, conditioned that if the contract shall be awarded to him he will, when required by said Board, execute an agreement in writing to perform the work according to the specifications.
3. All bids shall be presented to the Road Committee at the Freeholders' Rooms in the Court House, in Camden, on the TWENTY-FIRST DAY OF APRIL, inst., at the hour of 10 o'clock a. m., at which time and place all bids will be immediately and publicly read.
4. No bid shall be presented to any member of said Board, or any member of the Committee thereof, except at the above stated time and place.
5. The Board of Freeholders reserves the right to reject any and all bids.
6. That the successful bidder will be required to furnish a bond in the sum of at least $7,000, with satisfactory security, for the faithful performance of the contract, when the same shall have been awarded to him.

A copy of the specifications and profile may be seen at the office of the County Collector, in the Court House, Camden, N. J., from 10 to 12 o'clock a. m. HARRY F. WOLFE,
Director of Board of Chosen Freeholders.
April 6, 1897. 15-1t.

BRICK AND CHERT PAVING.

MERIDIAN, MISS., April 9, 1897.

Sealed proposals for paving streets in the city of Meridian, Miss., with vitrified brick, on concrete foundation, approximately 15,000 square yards, also proposals for paving with chert, approximately 30,000 square yards, addressed to I. A. Mooser, City Clerk, Meridian, Miss., will be received at the office of said City Clerk until 12 o'clock, noon, Friday, May 7, 1897. Specifications for each class of paving, including proposal blanks and all other necessary information may be had by application to undersigned Clerk or Mayor.

E. H. DIAL, Mayor.
I. A. MOOSER, City Clerk. 15-3t.

Other Proposals, Pages XXIV & XXVI.

the Rahway River to Cheapside in Millburn and Irvington, a little over three miles, with telford, and for the furnishing of crushed stone for Springfield and Frelinghuysen Ave. James Pearce, of Milburn, was awarded the contract for South Orange Ave., at 62 2-9 cts. a lin. ft. for telford paving, and 25 cts. a cu. yd. for excavating. It is said that the total cost will amount to about $20,000. The Mountainview Quarry Co. was given the contract for crushed stone on Frelinghuysen Ave. at $1.44 a net ton, and C. Lighthipe & Son for crushed stone on Springfield Ave. at $1.23 a net ton.

VIADUCT, PAVING, RAILING, ETC.—Denver, Colo.—The board of public works opened 14th St. viaduct bids April 8 as follows: Asphalt paving.—Colorado Paving Co., $2.31 a sq. yd.; F. O. Blake, $2.25. Brick paving.—J. M. O'Rourke, $2.15; R. P. McDonald, $2.10; Charles Connors, $1.78; Ben Brewer, $2.50; F. O. Blake, $1.89. Sandstone flagging.—Hackzell & Oten, $1.33½ a lin. ft.; R. P. McDonald, $1.41; Charles Connors, $1.34¾; E. S. Barker, $1.33; John Olson, $1.31; Sites & Bull, $1.35. Hand railing.—Stewart Iron Works, Cincinnati, $1.49 a lin. ft.; Denver Wire & Iron Works, $1.22. Stone curbing.—Colorado Paving Co., 65 cts. a lin. ft.; F. O. Blake, 69 cts.; J. M. O'Rourke, 75 cts.; R. P. McDonald, 77 cts.; Ben Brewer, 80 cts.

SEWERS.—Wilmington, Del.—T. Chalkley Hatton, Engr. Sewer Dept., informs us that the contract for constructing the Silverbrook sewer, as stated in Engineering News March 18, has been awarded to John Jacoby; bids were as follows:

BIDS RECEIVED MARCH 27 FOR CONSTRUCTING SILVERBROOK SEWER, WILMINGTON, DEL.

Quantities.		Engineer's estimate.	J. Mulloy & Co., Wilmington, Del.	John McCann, Wilmington, Del.	Hanna & Reilley, Chester, Pa.	Edw. H. Post, Wilkes Barre, Pa.	W. Lesher & Son, Easton, Pa.	H. C. Eyre, Chester, Pa.	Fell & Co., Orange, N. J.	A. S. Reed & Bro. Co., Wilmington, Del.	Acock & Son, Trenton, N. J.	B. J. Sullivan, Philadelphia, Pa.	M. Honan & Sons, Chester, Pa.	David France, Philadelphia, Pa.	Geo. Ruch & Co., Philadelphia, Pa.	John Jacoby, Wilmington, Del.
Brick sewers: 5 ft.	344 ft.	$5.95	$6.32	$6.50	$4.77	$5.12	$5.79	$7.44	$5.26	$5.93	$7.11	$5.65	$4.29	$7.01	$5.26	$7.00
4 ft. 6 ins.	758 "	5.53	5.63	6.30	4.57	4.79	5.10	7.44	5.13	5.47	6.63	5.28	3.98	7.11	4.96	7.00
5 ft. 6 ins. × 3 ft. 8 ins.	341 "	6.10	6.18	6.45	4.36	5.50	5.65	8.32	5.50	4.89	7.38	5.62	4.01	5.99	4.81	6.00
5 ft. 3 ins. × 3 ft. 6 ins.	316 "	7.18	7.59	8.00	3.80	7.96	12.46	8.44	5.64	6.49	9.08	7.97	5.44	6.09	4.55	5.00
5 ft. × 3 ft. 4 ins.	196 "	5.64	5.86	6.15	3.72	5.21	4.81	6.72	5.12	4.69	6.94	5.25	3.61	7.05	4.34	5.00
4 ft. 6 ins. × 3 ft.	311 "	5.74	5.86	6.00	3.69	5.12	5.04	6.50	5.27	4.93	7.51	5.24	3.46	5.39	4.45	5.00
4 ft. 3 ins. × 2 ft. 10 ins.	276 "	5.43	5.56	5.80	3.56	4.85	4.38	6.50	5.15	4.81	6.89	5.00	3.26	4.29	4.22	5.00
4 ft. × 2 ft. 8 ins.	250 "	5.57	5.67	6.00	3.86	5.20	4.26	6.50	5.27	4.97	7.43	5.09	3.04	4.34	4.15	5.00
3 ft. 9 ins. × 2 ft. 6 ins.	210 "	5.28	5.38	6.00	3.76	4.89	3.91	5.80	5.10	4.66	6.93	4.83	2.66	4.17	4.07	5.00
Concrete sewers: 5 ft.	344 "	6.43	7.34	6.50	4.67	7.45	10.84	9.36	5.26	7.00	9.51	8.50	5.16	9.00	7.03	6.25
4 ft. 6 ins.	758 "	6.00	6.83	6.40	4.47	6.95	8.52	9.00	5.13	6.13	8.91	7.75	4.98	9.00	6.62	6.00
5 ft. 6 ins. × 3 ft. 8 ins.	341 "	5.44	6.06	5.30	4.26	6.53	7.85	9.20	5.50	5.09	7.85	7.00	4.38	8.00	5.48	5.50
5 ft. 3 ins. × 3 ft. 6 ins.	316 "	6.87	9.55	7.70	3.70	8.76	8.40	8.24	5.64	5.98	8.84	8.75	5.65	8.00	8.71	4.90
5 ft. × 3 ft. 4 ins.	196 "	5.25	4.77	5.50	3.62	6.05	7.32	7.66	5.12	5.05	7.32	6.70	4.31	7.00	5.35	4.75
Terra cotta pipe sewers: 24 ins. diameter	6,945 "	1.43	1.70	1.65	1.38	1.58	1.52	1.77	1.60	1.97	1.77	2.50	1.39	1.67	1.48	1.30
20 ins. diameter	2,103 "	1.67	1.65	1.65	1.38	1.58	1.15	1.84	1.20	1.59	1.71	2.35	1.33	1.39	1.94	1.20
18 ins. "	3,078 "	.90	1.25	1.50	.94	1.06	.90	1.37	1.05	1.31	1.03	1.77	.93	1.21	1.13	.90
Manholes in brick sewer	12...	37.50	25.00	50.00	37.72	45.00	45.00	35.00	22.00	43.00	45.00	30.00	40.00	45.00	25.00	40.00
Pipe sewer	40...	35.00	20.00	50.00	35.00	40.00	35.00	40.00	30.00	45.00	35.00	30.00	37.00	45.00	30.00	40.00
Flushing apparatus: Plate A	1...	1077.14	85.00	1000.00	939.00	1270.95	1054.00	1557.80	550.00	1339.00	824.00	2000.00	992.45	175.00	1000.00	300.00
Plate B	3...	370.29	75.00	200.00	236.00	399.24	385.00	528.00	200.00	445.00	350.00	500.00	442.75	175.00	598.00	100.00
Plate C	1...	226.54	70.00	200.00	175.00	299.63	262.00	418.80	300.00	267.00	300.00	300.00	251.85	175.00	183.00	100.00
6-in. slants in brick sewer	200...	20.00	.50	.25	.20	.50	.25	.15	.15	.27	.30	.40	.25	...	.08	...
Rock excavation, per cu. yd.	1,064...	200.00	3.00	3.00	2.25	2.25	2.00	3.50	2.50	2.15	3.50	2.00	2.37	2.21	1.45	2.50
Time to complete work, $5 per day		150	100	180	90	90	150	180	75	125	120	150	100	210	200	1
Total (B)		$41,874	$42,396	$47,259	$34,345	$41,433	$40,411	$52,292	$38,655	$45,178	$49,325	$52,777	$34,498	$47,833	$38,811	$37,322
Total (C)		40,996	44,022	46,721	34,149	44,640	44,700	54,556	38,655	46,024	52,037	56,631	35,885	46,229	42,419	36,055

DREDGING.—Oswego, N. Y.—Maj. W. S. Stanton, U. S. Engrs., received the following bids April 8 for dredging at Ogdensburg, N. Y., as advertised in Engineering News: Wm. E. Hinston, Buffalo, 49 cts. a cu. yd. for hardpan and boulders, and 14¾ cts. for soft dredging; W. J. Daly, Ogdensburg, 40 and 13 cts.

WATER MAIN.—Duluth, Minn.—The following bids were opened April 9 for furnishing and laying 11,060 ft. of 36-in. cast-iron or steel water main, as advertised in Engineering News:

Cast-Iron Pipe.	36-in. pipe, 1-in. thick, 8,606 lin. ft.	36-in. pipe, ⅞-in. thick, 2,454 lin. ft.	Extra special castings, per lb.	Total.
Engle & Osman, Duluth	$4.66½	$4.66½	$0.04	$51,595
P. McDonnell, Duluth	4.75	4.25	.03	51,308
J. A. Burke, West Superior	4.72	4.26	.03½	51,074
King & Steele, Duluth	4.30	4.30	.03¼	47,558

Steel Pipe.	36-in. pipe, ¾-in. thick, 11,060 lin. ft.	Manholes and covers, 19.	4-in. flanged openings for air valves, 6.	16-in. brnchs flanged ends, 2.	6-in. brnchs flanged ends, 23.	36-in. Ys, with 6-in. bottom outlet, 1.	Total.
Carroll Porter Boiler & Tank Co., Pittsburg, Pa.	$4.25	$15.00	$10.00	$20.00	$10.00	$200.00	$47,820
Gillette-Herzog Mfg. Co., Minneapolis, Minn.	3.55	13.00	6.00	16.00	6.00	200.00	39,916
N. F. Hugo, Duluth, Minn.	4.40	35.00	12.00	40.00	13.00	125.00	49,905
King & Steele, Duluth, Minn.	4.04	20.00	10.00	30.00	15.00	236.00	45,763

WATER-WORKS.—Hiram, O.—B. S. Dean, Clk. Bd., writes us that the following bids were received April 8 for furnishing materials and constructing water-works, as advertised in Engineering News: Pipe.—Addyston Pipe & Steel Co., $16 a net ton; Lake Shore Foundry, $16.75; specials, 2 cts. a lb.; Anniston Pipe & Foundry Co., $16.10 and 1¾ cts.; So. Pittsburg Pipe Works, $16.50 and 2 cts. Laying 8, 6 and 4-in. pipe.—Chandley Bros., Beaver Falls, Pa., 20 cts., 18 cts. and 16 cts., respectively, for 8, 6 and 4-in.; Jacob Brenner, Warren, O., 16 cts., 14 cts., 13 cts.; J. W. Kelley, New Brighton, Pa., 21 cts., 17 cts., 16 cts.; Shaw & Kendall Engineering Co., Toledo, 18 cts., 14 cts., 12 cts.; H. D. Shannon & Co., Orville, O., 20 cts., 18 cts., 16 cts.; Phillips & Bexel, Cleveland, 18 cts., 15 cts., 13 cts.; S. I. Pope Co., Chicago, 16 cts., 12 cts., 10 cts. Gas engine.—Armitage & Smith, Attica, O., 20-HP., $932; 25-HP., $992; Goulds Mfg. Co., Seneca Falls, N. Y., 10-HP., $555; 20-HP., $845; Ramsey & Co., Seneca Falls, N. Y., 7½-HP., $488; 20-HP., $824; Fairbanks, Morse & Co., Cleveland, 10-HP., $500; 20-HP., $750; Cleveland Engine & Electric Co., Cleveland, 10-HP., $600. Power pump.—Goulds Mfg. Co., 5 × 8-in., $385; 8 × 10-in., $715; The Deming Co., Salem, O., 5½ × 8-in., $562; 8 × 10-in., $830; Stillwell-Bierce & Smith-Vaile Co., Dayton, O., 5 × 8-in., $434; 8 × 10-in., $751; Rumsey & Co., 5 × 8-in., $356; 8 × 10-in., $740; Fairbanks, Morse & Co., duplex, $475; Laidlaw, Dunn-Gordon Co., duplex, $424; triplex, 6 × 8, $532. Steel stand-pipe, 12 × 60 ft., including foundation.—Warren City Boiler Works, Warren, O., $2,100; Cleveland Steam Boiler Works, Cleveland, O., $2,448; Reeves Bros., Alliance, O., $2,500; Chicago Bridge & Iron Co., Chicago, Ill., $1,800. Bids for the pipe system complete ranged from $7,250 to $7,750; for a collecting well 25 ft. in diameter by 8 ft. deep, $303 to $760; bids for stand-pipe submitted by the contractors, $1,675 to $2,150; pumping station, $575 to $750; complete plant, $10,898 to $13,489.

INDUSTRIAL NOTES.

THE SOUTH BALTIMORE CAR WORKS, Baltimore, Md., is building 260 coal cars for the Baltimore & Ohio R. R.

THE MICHIGAN PENINSULAR CAR CO., Detroit, Mich., has orders from the Mexican Central Ry. for 325 box, 150 coal and 75 stock cars; and from the Northern Pacific R. R. for 150 flat cars.

THE VARIETY IRON WORKS CO., of Cleveland, O., Mr. J. H. Webster, Assignee, has recently completed the work of rebuilding its plant No. 2, which was burned in December, 1896, and is about to put it into operation.

THE BETHLEHEM IRON CO., South Bethlehem, Pa., made a shipment to Sandy Hook, N. J., April 5, of 24 guns for the U. S. Government. The guns are mostly 8 and 10-inch and are ready for mounting on their carriages.

THE OLIVER & SNYDER STEEL CO., Pittsburg, Pa., has opened new offices in the German National Bank building. Chn., H. W. Oliver; Pres., W. P. Snyder; Vice-Pres., G. F. Oliver; Secy., George L. Brown; Treas., James Collard.

THE IRON CITY MFG. CO., Pittsburg, Pa., succeeding A. Northrop & Co. in the manufacture of metal ceilings, has elected the following officers: Pres. and Gen. Mgr., H. M. Priest; Secy. and Treas., W. L. Bender; Supt., W. S. Grafton.

THE BARBER ASPHALT PAVING CO., has recently completed the largest single paving contract ever awarded in Kansas City, Mo., says the local papers of that city. The contract was awarded in December, and called for 33,502 sq. yds. of asphalt pavement, at $2.25 a sq. yd.

THE CONTINUOUS RAIL JOINT CO. OF AMERICA, Newark, N. J., at the annual meeting of stockholders April 1 elected the following directors for ensuing year: Robert Gray, Jr., George G. Frelinghuysen, Abraham W. Thompson, Frederick T. Fearey and Fernando C. Runyon.

THE LAMBERT HOISTING ENGINE CO., Newark, N. J., has been incorporated as a successor to the W. A. Crook & Bro.'s Co. The business will be continued as heretofore. Pres., E. R. Carhuff; Vice-Pres., Wm. Paul, Jr.; Secy., D. A. Lowber; Treas. and Gen. Mgr., A. Lambert.

THE GEO. F. BLAKE MFG. CO., New York, has furnished an entire outfit of Blake pumps of its improved vertical Admiralty type for feeding the boilers, fire service, etc., for the new gun boats "Wilmington" and "Helena," recently completed by the Newport News Ship & Engine Building Co.

JOHN S. LANE & SON, Meriden, Conn., are putting up a Lidgerwood cable conveyor, stone crusher and other machinery preparatory to building a dam 650 ft. long, 45 ft. above surface, with 6-ft. concrete core for the New Milford, Conn., water-works. The firm has a contract also for macadamizing a cemetery road at New London.

THE PHOENIX BRIDGE CO., Phoenixville, Pa., has just secured contracts for three bridges for the Northern Pacific R. R., a large recreation pier in New York city, steel viaduct and 16 plate girder spans for the Reading R. R., making it necessary to increase forces in mills and shops and run full double turn. Mr. John Sterling Deans is chief engineer for the Phoenix Bridge Co.

THE BERLIN IRON BRIDGE CO., of East Berlin, Conn., has a contract for furnishing the steel roof for a large storehouse which is to be erected by the Waterbury Mfg. Co., Waterbury, Conn. This building is 54 ft. wide and 144 ft. long. The side walls are of brick. The roof will be supported by steel trusses. The covering is to be corrugated iron, lined with the Berlin company's patent anti-condensation fireproof roof lining.

THE A. & P. ROBERTS CO., Philadelphia, Pa., has opened a branch office in the American Surety building, 100 Broadway, New York. Direct private telephone wires will connect the new office with the Philadelphia office and the works at Pencoyd, Pa. The company is said to have just been awarded a contract by the Japanese Government for 2,000 tons of structural bridge steel, 186 steel spans, for the Imperial Japanese Ry.

THE NATIONAL SWITCH & SIGNAL CO., of Easton, Pa., has been awarded the contract for 100,000 plus (50,000 lbs.) such as are used in installing the ground work for interlocking plants, to be shipped to England. They are to be ⅞ in. in diameter by 3 ins. long and have square heads. Mr. Charles Hansel, M. Am. Soc. C. E., has invented a machine, with a daily capacity of 600, for turning out these pins with square heads which greatly reduces the cost of them.

THE H. W. JOHNS MFG. CO., which has for a quarter of a century had its offices at 87 Maiden Lane, New York City, will shortly remove to the new Woodbridge Building, corner of William and John streets, just approaching completion. The H. W. Johns Co. has leased the entire ground floor of this building and it is now being fitted up to accommodate the company's salesrooms, accounting departments, etc., while the basement will be used for stock. It is interesting to note that Mr. H. W. Johns, who established this firm more than 25 years ago, is still its active head.

MAIRS & LEWIS, 18 Broadway, New York, are putting in the piers for the Tukey's bridge from Portland to Deering, Me. They have just completed the piers and abutments for the new Portland & Rumford Falls R. R. bridge which is to span the Androscoggin just above Chisholm's Mills on the extension from Gilbertsville to Livermore is, but the iron which is on hand ready for the bridge men will not be put on until after the ice goes out this spring. The building of the two abutments was not very difficult work, but in the construction of the piers the contractors are said to have experienced a most difficult job.

THE CARNEGIE STEEL CO., Pittsburg, Pa., is said to have obtained the contract for what is claimed to be the first steel building erected in Japan. Tamasuki Yokokawa, a Japanese engineer, educated in the United States, prepared the plans and was in Pittsburg this week to consult with the Carnegie Co. concerning some of the details of the work. The proposed building will be 150x235 ft. and is being built by Matsui & Co., of Tokio, for office and mercantile purposes. Owing to the prevalence of earthquakes it will be only four stories high. About 1,500 tons of steel material will be used in the structure. The first shipment of materials will be from New York on Sept. 1, and the whole contract is to be completed before Nov. 1.

THE J. O. FROST'S SONS MFG. CO., Towanda, Pa., reports a constantly increasing demand for its Loetzer hydrants and valves, described in Engineering News of March 18. The company has recently supplied a line of special goods to the St. Mary's Gas Co., St. Mary's, Pa., and the Pennsylvania & New York Co., Johnsonburg, Pa., to stand a working pressure of 800 lbs. a sq. in. natural gas pressure. These were tested for 30 minutes at a hydraulic pressure of 1,500 lbs. a sq. in., and it is thought would have stood 3,000 lbs. The company has just arranged with Mr. Campbell, a civil and hydraulic engineer, of the city of Mexico, to become its agent for that territory. Mr. C. E. Loetzer is general manager of the company.

THE WESTINGHOUSE ELECTRIC & MFG. Co., Pittsburg, Pa., has constructed an alternating current fan motor for the season of 1897 that is claimed to have many advantages of construction and operation. It is of the induction type and differs somewhat from the mechanical proportions of the fan motors of recent years in being smaller and lighter. It retains the feature that was introduced in the Westinghouse fan motor of last year of "speed, variable at will," which is effected by the use of a three-contract switch of simple construction located in the base of the fan motor. By means of this switch the motor may be run at full speed, at moderate speed, or it may be cut out of the circuit. The motor is especially adapted for a sick room or a bedroom at night, securing effective circulation of air and operating almost without noise. This fan motor has neither a commutator nor brushes, and is said to weigh complete, ready for service, 25 lbs.

WM. TOD & CO. Youngstown, O., have recently received several large contracts, including one for an engine for a coffee plantation in Honduras.

NEW COMPANIES.—Yonkers, Telephone Co., New York, N. Y.; $150,000; to construct and operate telephone lines in this state; Peter G. Kemp, Theodore D. Coe, Dr. Geo. M. Ball.

United States Concrete & Paving Co., Jersey City, N. J.; $25,000, commencing with $6,000; making and laying concrete and asphalt sidewalks, streets, etc.; Daniel H. Varnum, Manchester, N. H.; Albert H. Watkins, Keene, N. H.; Edwin G. Maturin, Jersey City, N. J.

El Paso Brick Co., El Paso, Tex.; $100,000, commencing with $6,000; to manufacture brick, tile, etc. J. H. White, J. P. Cottrell, F. L. Myers, El Paso, Tex.

Cooper General Machine & Electric Co., New York, N. Y.; $10,000. Robert Cooper, Jersey City, N. J.; Charles W. Congdon and James H. Williams, Brooklyn, N. Y.

Sewer Inlet

Acknowledged the simplest and most practical Sewer Inlet made.

Steel Screw Sewer Jacks, with Swivel Head.

Street and Sewer Castings made any style. Send blue prints for estimates.

Manhole.

THE SOUTH BEND FOUNDRY CO., South Bend, Ind.

KALAMAZOO FOUNDRY AND MACHINE CO., Kalamazoo, Mich.

The simplest, strongest, most durable and cheapest Sewer Brace on the market.

THE ONLY BRACE MADE WITH STEEL SCREW.

SANITARY CONSTRUCTION CO.,

56-58 PINE STREET, NEW YORK,

HOUSEHOLD GARBAGE CARBONIZER, for the Disposal of Domestic Waste.
PORTABLE GARBAGE FURNACES, for Hotels, etc.
STEAM DISINFECTING APPARATUS, for Public Institutions and Cities.
FORMALDEHYDE GAS REGENERATORS, for House Disinfection.
SEND FOR CATALOGUE. GARBAGE CREMATORS for Cities.

HAWKEYE GRUB AND STUMP MACHINE

Makes clean sweep of two acres at a sitting. Pulls an ordinary Grub in 1½ minutes.

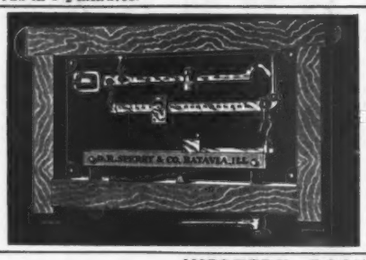
Is a MONEY SAVER for CONTRACTORS and ENGINEERS having Right-of-Ways and Reservoir Sites to clear, and Levee and Dike Contracts.

90 page Catalogue free on application.
Works on either standing Timber or Stumps.

MILNE MFG. CO., 267 Eighth St., Monmouth, Ill.

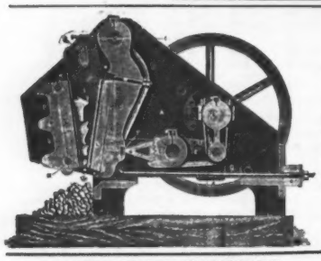
SPERRY'S TESTING MACHINE

For showing Transverse strength of Foundry Test Bars.



Everybody interested, please send for descriptive circular,

D. R. SPERRY & CO.
BATAVIA, ILL.



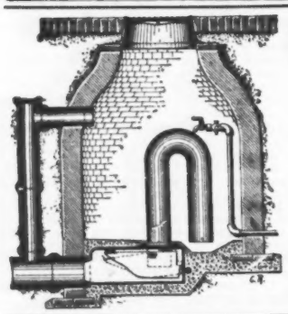
WESTERN ROCK CRUSHER.

CHEAP. Simplest in Construction. BEST.

We also Manufacture:
Wheeled Scrapers, Drag Scrapers, Plows, Dump Cars, Dump Wagons, Road Graders, Wheelbarrows, Elevating Grader, Pitcher and Wagon Loader, and kinds of Contractors' Supplies.

Send for our 56-page Catalogue Valuable for reference.

Western Wheeled Scraper Co.
AURORA ILL.



THE VAN VRANKEN AUTOMATIC SEWER FLUSH TANK

Will discharge with the smallest feed stream of any tank in the market. Does not require excavation below the bottom of the sewer; can be used where the depth of sewer is but two and one-half feet.

For catalogues, discounts and other particulars, address

J. LELAND FITZGERALD,
SCHENECTADY, NEW YORK.

J. N. Du Barry, Jr., & Co.
Harrison Building, Philadelphia, Pa.
RAILWAY SUPPLIES,
CONTRACTORS' SUPPLIES,
CEMENTS.

J. N. Du Barry, Jr., & Co.
Builders' Exchange, Baltimore, Md.
CEMENTS,
BUILDERS' MATERIALS,
HARDWOOD and SLATE MANTELS.
SEWER PIPE.

Agents or Stirling Boilers,
Meissner Stoker,
Pedrick & Ayer Co.

"BLASTING CAPS."

RHENISH WESTPHALIAN EXPLOSIVES COMPANY, LIMd.
COLOGNE

FR. SCHROEDER
Sole Agent for the U. S. A.,
66 Maiden Lane New York.

FLEXIBLE JOINTS

FOR WATER PIPES, FOR GAS, OIL, COMPRESSED AIR, ETC.
Strongest, Cheapest, Easiest to Use.
Contracts taken for Submerged Pipe Laying.
Correspondence Solicited.
A. L. HOLMES,
Grand Rapids, Mich.

CHAPMAN DERRICK AND WRECKING CO.,
27 William St., New York.
EXPERIENCED DIVERS
For Laying and Repairing Pipe Under Water,
Submarine Examinations.
Office open day and night.
Two long distance telephones.
Broad, 1831 and 1832.

Fibre Conduit.

Water, Brine, Acid, Drain and Gas Pipe and Electrical Conduit.

It is light, tough and strong, easily handled and rapidly laid.
It is non-absorbent, impervious and not effected by air, moisture, salts, acids, alkalies nor gas.
Will remain unchanged indefinitely in any soil or climate.
Does not expand or contract with heat or cold.
Has permanently tight joints.

POWER

POWER SPECIALTY CO.
126 Liberty St., N. Y.

ABUTMENT WALLS AND PIERS.

OFFICE OF COMMISSIONER OF PUBLIC WORKS,
CITY HALL,
PROVIDENCE, R. I., March 26, 1897.

Sealed proposals addressed to the Commissioner of Public Works, City Hall, Providence, R. I., will be received until 11 o'clock, a. m., April 20, 1897, for removing the old bridging and constructing new abutment walls and piers at the site of the Weybosset bridge, and constructing new river walls from Weybosset bridge to the south line of Crawford Street bridge.

Plans and specifications may be seen at the office of the City Engineer, where blank forms of contract, proposal and bonds may be obtained.

Each proposal must be accompanied by a bond or certified check for Three Thousand Dollars.

The right to reject any or all bids is reserved.

ROBERT E. SMITH,
13-3t Commissioner of Public Works.

U. S. ENGINEER OFFICE, Oswego, N. Y., March 23, 1897.—Sealed proposals for EXCAVATING ROCK and FOR DREDGING at Oswego Harbor, N. Y., will be received here until noon, April 29, 1897, and then publicly opened. Information furnished upon application. W. S. STANTON, Major Engrs. 13-4t

SEWERS.

RED BANK, N. J.

Sealed proposals for furnishing materials and labor, and constructing sewers and appurtenances, will be received by the Board of Town Commissioners up to 8 o'clock p. m., on Tuesday, April 20, 1897. Proposals shall be addressed to "A. C. Harrison, Town Clerk Red Bank, N. J.," and shall be endorsed on the outside with the name and address of the party or parties making the bid, and marked "Proposal for Sewer Work, Second Contract." A certified check in the sum of five per cent. of the total amount bid, must accompany each proposal, as a guarantee of intention. The party or parties to whom the contract may be awarded will be required to furnish security, satisfactory to the Commissioners, to the amount of 50 per cent. of the total price bid. Preference shall be given to local labor in the performance of the work. Further information may be obtained, and plans and specifications seen, at the office of the Town Clerk in Red Bank, or at the office of the engineers, 108 Fulton St., New York City. The Commissioners expressly reserve the right to reject any and all bids.

O. E. DAVIS,
W. P. FRYE,
P. T. BRADY,
M. F. CORNWALL,
S. SABATH,
Board of Town Commissioners.
A. C. HARRISON, Town Clerk.
HEDENBERG & KINSEY, Engineers. 14-2t

For Other Proposals See Page XXVI.

MILLER AUTOMATIC SIPHON

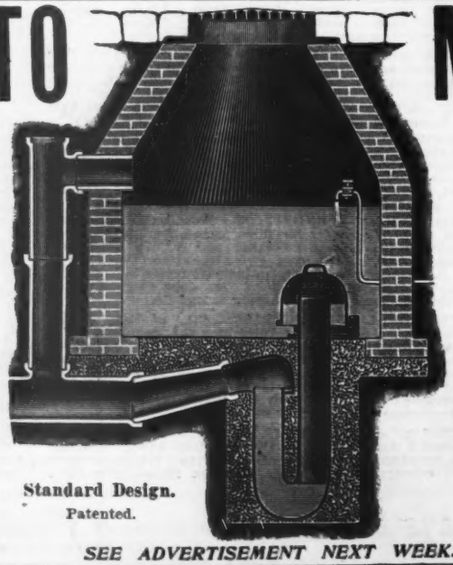
—FOR—

Intermittent Flush Tanks.

SIMPLEST SIPHON MADE.

No Moving Parts;
No Valves;
No Small Tubes to clog or choke.

WE GUARANTEE EVERY SIPHON TO BE ABSOLUTELY RELIABLE—NO MATTER HOW SMALL THE STREAM MAY BE.



Standard Design.
Patented.

—FOR—

Flushing Street Sewers and for Sub-Soil Irrigation.

Most Reliable Siphon Made.

Received Highest Award at World's Columbian Exposition, 1893 for SIMPLICITY OF CONSTRUCTION, EFFICIENCY and RELIABILITY.

MANUFACTURED BY

Pacific Flush Tank Co.

84 LA SALLE STREET, CHICAGO.

WRITE FOR CATALOGUE AND PRICES.

SEE ADVERTISEMENT NEXT WEEK.

New York State Telephone Co.; $200,000; to operate in Herkimer, Montgomery, Fulton, Schenectady, Albany and adjoining counties. Isaac J. Evans, Rome, N. Y.; William Clark, John D. Wendell, Willis E. Diefendorf, Fort Plain.

Thomas J. Dowling Co., Albany, N. Y.; $20,000; to manufacture iron and steel work for building purposes, fences, fire escapes, etc.; Thos. J. Dowling, James H. Carroll, John W. McNamara.

Union Telephone Co., Portland, Ore.; $5,000; to construct telephone lines in the eastern part of Union county; J. M. Carroll, F. E. Foster, Joseph Wright.

Woodman Building Co., $50,000; to make loans and erect buildings in El Paso county. E. W. Stephens, C. B. Bist, J. J. Morse.

Bay Ridge, Fort Hamilton & Norton Point Ferry Co.; $10,000, with privilege to increase to $250,000; Frank Seaman, William Scott, John J. Donohue.

United States Land Co., Jersey City, N. J.; $500,000, commencing with $200,000; to promote immigration, encourage agriculture, and to sink wells and construct ditches and canals for irrigation purposes. Saml. M. Jarvis.

Hamilton Coal Co.; $100,000, commencing with $500; to mine coal, manufacture coke, construct tram roads, etc.; H. G. Davis, Elkins, W. Va.; C. M. Hendley, Washington, D. C.

Girard Construction Co., Girard, W. Va.; $3,000,000, commencing with $100; to construct buildings, roads, bridges, sewers, canal wharves, etc. John M. Sharp, William Whyte, Wm. A. Tice, Edwin C. Nevin, Fred. W. Gourlay, Philadelphia, Pa.

Manhattan Car Wheel Co., Buffalo, N. Y.; $10,000; to manufacture car wheels. P. Henry Griffin, T. Guilford Smith, Charles V. Slocum, Warren P. King, Buffalo; John A. Granger, New York City.

Payne Engineering Co., New York, N. Y.; $10,000; to manufacture electrical apparatus, gas, steam engines. Stephen H. and Nathan B. Payne, New Brighton, S. I.; Albert G. Duncan, New York City.

Denison & Choctaw Telephone Co., Denison, Tex.; $10,000; to construct, maintain and operate a telephone line from Denison to Fort Smith, Ark. John M. Hodges and Chas. W. Dunstan, Atoka, I. T.; G. W. Johnston, Galveston, Tex.; John A. Onderdonk, Nursery, Tex.

Mannados Engineering Co., New York, N. Y.; $25,000. G. F. Schempel, A. R. Wheeler and Chas. L. Spencer, New York; C. F. Berger, Newark, N. J.; A. A. Lane, Brooklyn, N. Y.

Williams-Abbott Electric Co., Cleveland, O.; $10,000; to manufacture telephone supplies. F. M. Kirk, S. D. Latty, H. T. Latty, J. A. Williams, S. B. Abbott and Samuel Albert, Jr.

Genesee Telephone Co., Wellsville, N. Y.; $5,000; to operate a telephone system in Allegheny County. Edwin C. Bradley, James Macken, William E. Smith, John McEwen, Alfred S. Brown, Edward C. Brown and John McPherson.

National Wall Plaster Co of America, Syracuse, N. Y.; $100,000. George West, Eugene West, Mansfield J. French, Charles H. Remer, Frank H. Hale, Edward I. Rockwell, Daniel A. Pierce.

Columbia Iron Foundry Co., Jersey City, N. J.; $25,000, commencing with $5,000. Theodore Smith, Michael J. Russell, Samuel C. Smith, John Brennan, Jersey City, N. J.; William H. Cornell, Brooklyn, N. Y.

Barber Mfg. Co., Wheeling, W. Va.; $50,000, commencing with $15,000; to manufacture warm air furnaces, etc.; Byron Barber, S. W. Crosby, L. L. Jackson, Ashtabula, O. vis, Roland R. Conklin, Stanley L. Conklin, F. P. Radcliffe, New York city; F. C. Prest, East Orange, N. J.

McManus Construction Co., Camden, N. J.; $500,000, commencing with $1,000; to build, construct and repair water, gas and electric works, tunnels, bridges, railroads, etc. Patricius McManus, Horace A. Doan, Philadelphia, Pa.; Norman Grey, Camden, N. J.

Albert A. Cryer Co., Newark, N. J.; $10,000, commencing with $8,300; to supply all necessary material and labor for water heating and ventilation of buildings. Albert A. Cryer, John W. Cryer, 225 Orange St., Newark; George Rinlsenberger, 75 Bedford St., New York, N. Y.; Edwin H. Hobby, 436 Hancock St., Brooklyn, N. Y.

Buffalo Gas Heating & Automatic Regulating Co., Buffalo, N. Y.; $20,000; to manufacture, sell and lease heating and heat regulating devices. Edward R. Wars, Worcester, Mass.; Frederick F. Gumaer, Oswego, N. Y.

Manhattan Construction & Equipment Co., New York, N. Y.; $500; for the construction and equipment of railroads. Edward P. Steers, John A. Megargee, Davenent Rodger, New York.

Columbia Dredging & Construction Co., Washington, D. C.; $100,000; to own and operate dredges and to build bridges, docks, etc. Edgar R. Jackson, A. M. Clegg, W. N. Burke, Westel Willougby and W. F. Willoughby.

St. Lawrence Construction Co., Jersey City, N. J.; $100,000, commencing with $2,500; to build and repair railways, gas or electrical works, etc. E. M. F. Miller, C. Howard Reeve, H. S. Marshall, New York, N. Y.

Van Brunt Co., Beverly, N. J.; $100,000, commencing with $1,000; to buy, excavate and sell sand, building stone, build roads, sewers, bridges, etc. Henry W. Davis, Camden, N. J.; Joseph L. Simon, Beverly, N. J.

Compressed Air Power Co., Paterson, N. J.; $50,000, commencing with $1,000; to manufacture, erect, manage, operate, etc.; Haywood A. Hawley, Orange, N. J.; Hobart Tuttle, Paterson, N. J.; Lawrence S. Mott, Newark, N. J.

WATER-WORKS.

OFFICE OF VILLAGE CLERK,
MEDINA, OHIO, March 30, 1897.

Sealed proposals will be received by the Council of the Village of Medina, at the office of the Clerk of said village until 12 o'clock noon, on Saturday, the 30th day of April, 1897, for furnishing the necessary material, machinery, etc., to erect and install the following:

One Steel Stand-Pipe, 14 × 90 ft.
One Building for Pumping Station.
One deep well pumping Engine, with Boiler, Heater, etc., etc.
990 ft. (approx.) 8-in. pipe, laid.
870 ft. (") 6-in. pipe, laid.
6 (") Fire Hydrants.
4 (") Gate Valves and Boxes.

Demolition of Old Pumping Station;

all in accordance with the plans and specifications now on file in the office of the Clerk of said village and the office of the Engineer in Chicago.

Each bid must be accompanied by a certified check on some bank in the village of Medina, in the sum of Five Hundred Dollars ($500.00).

Bidders must use the printed forms furnished by the Village Clerk, as none others will be received.

The Council reserves the right to reject any or all bids. N. H. McCLURE, Mayor.
HIRAM GOODWIN, Clerk.

BURTON J. ASHLEY, Engineer,
15-2t 511 Opera House Bldg., Chicago.

BRICK PAVING.

EASTON, PA.

Sealed proposals will be received until 7:30 p. m. Thursday, April 29, 1897, by the undersigned, for the City of Easton, Pa., at the office of the City Engineer, Municipal Building, for the paving of that portion of Centre Square south of the north building line of Northampton St.; Washington St., from Tenth to Eleventh St.; and Fourth St., from Northampton to Church St., with vitrified paving brick, on a six-inch concrete base, in accordance with the plans and specifications on file in the office of the City Engineer.

Samples of brick and sand, properly labeled, must be submitted on or before April 28, 1897.

Contractors will bid separately on each street and enclose the same and certified check in one envelope, marked "Proposals for Street Paving."

Each proposal must be made upon the "form" furnished by the City Engineer.

No bid will be considered unless accompanied by a certified check drawn to the order of the Treasurer of Easton, Pa., or New York draft to the amount of $500. All such deposits, except that of the successful bidder, will be returned to the person making the same within ten days after the contract is awarded. If the successful bidder shall refuse or neglect, within ten days after notice that the contract has been awarded, to execute the same and furnish a bond acceptable to a joint convention of Councils in the sum of one-half of the amount of contract, the amount of deposit made by him shall be forfeited to and retained by the City of Easton as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit shall be returned to him.

Specifications, blank forms, and all available information will be furnished on application to this office.

The city reserves the right to reject any or all bids. H. R. FEHR,
15-2t City Engineer.

Proposals for a Supply of Pure, Wholesome and Potable Water.

HOBOKEN, N. J.

Sealed proposals will be received at the office of the Board of Water Commissioners of the City of Hoboken, N. J., on Friday, the 30th day of April, A. D. 1897, at 8 o'clock p. m. for a supply of pure, wholesome and potable water for the term of fifteen, twenty and twenty-five years respectively from the 1st day of November, A. D. 1898, in accordance with certain resolutions passed by the Board of Water Commissioners on the 8th day of April, 1897, a copy of which may be obtained upon application at the office of the Water Register in the City Hall in the City of Hoboken. Said proposals may also contain an option for the acquiring by the city of the land, water and water rights for such supply after five, ten, fifteen or twenty years.

Each bidder must accompany his proposal with a certified check for $50,000 drawn upon a national bank, payable to the Board of Water Commissioners of the City of Hoboken. Proposals must be enclosed in sealed envelopes, endorsed "Proposals for a supply of water for the City of Hoboken, N. J." directed to the Board of Water Commissioners of the City of Hoboken, N. J., and handed to the Register of said Board, in open meeting, when called for.

The successful bidder shall also furnish a bond, as required by said resolutions, in the sum of $250,000 upon the execution of the contract with two or more sufficient, individual sureties residing in Hudson County, or with an approved Surety Company, conditioned for the faithful performance of said contract. Said bond to be renewed every five years during the term of said contract, and to be approved as to form by the Counsel of the Board of Water Commissioners and as to the sufficiency of the sureties by the Board of Water Commissioners of the City of Hoboken. The Board, according to the terms of the resolutions, reserve the right to reject any and all proposals, if deemed for the best interest of the city so to do.

By order of the Board of Water Commissioners. HENRY LOHMANN, JR.,
Water Register.

Hoboken, N. J., April 9, 1897. 15-3t.

WATER MAIN.

KEARNEY, N. J.

Sealed proposals will be received by the Board of Township Committee of the Township of Kearney, at the Township Hall, on April 27, 1897, at 9 p. m. for the furnishing and laying of Twelve Thousand (12,000) feet of Water Main, according to plans and specifications prepared by the Township Surveyor and on file in the office of the Township Clerk.

Each proposal must be accompanied by a certified check for five (5) per cent. of the amount of the proposal.

The Board of Township Committee reserves the right to reject any or all bids.

By order of the Board.
BURTON E. CANFIELD,
Township Clerk.

Kearney, N. J., April 9, 1897. 15-2t.

U. S. ENGINEER OFFICE, 366 Milwaukee St., Milwaukee, Wis., April 5, 1897.—Sealed proposals for DREDGING 50,000 cubic yards, more or less, at Green Bay Harbor, Wis., in Fox River below DePere, will be received here until 12 o'clock noon, May 6, 1897, and then publicly opened. Information furnished on application. GEORGE A. ZINN, Capt., Engrs. 14-4t

PROPOSALS FOR PAVEMENTS.

ELMIRA, N. Y.

Until Monday, May 3d, 1897, at 8 o'clock p. m., sealed proposals will be received by the undersigned at his office in the Masonic Temple, city of Elmira, N. Y., for paving West Church, from the westerly line of Walnut street to the westerly line of Hoffman street, in accordance with the proposal, agreement and specifications on file in said office. Also for curbing and resetting or renewing old curbing on said portion of said street.

Proposals to be endorsed "Proposal for Pavements."

The Board of Public Works reserves the right to reject any or all proposals.

THOMAS SPENCE,
Clerk Board of Public Works.

Dated Elmira, N. Y., April 14, 1897. 15-1t

BRIDGE SPANS.

BOSTON TRANSIT COMMISSION. CHARLESTOWN BRIDGE.—Sealed bids for building eight spans of STEEL SUPERSTRUCTURE for CHARLESTOWN BRIDGE will be received by the Boston Transit Commission at its office, 20 Beacon St., Boston, Mass., until 12 o'clock m., of Wednesday, April 28, 1897, and at that time and place will be publicly opened and read. No bid will be received and deposited unless accompanied by a properly certified check for the sum of Five Thousand Dollars, payable to the order of the Treasurer of the City of Boston, which check will be returned to the bidder unless he fails to execute the contract should it be awarded to him. Notice to contractors—Bid, contract, specifications and bond can be obtained, and plans can be seen at the office of the City Engineer, City Hall, Boston. The Commission reserves the right to reject any and all bids. GEORGE G. CROCKER, Chairman; CHARLES H. DALTON, THOMAS J. GARGAN, GEORGE F. SWAIN, HORACE G. ALLEN, Boston Transit Commission; B. LEIGHTON BEAL, Secretary.

April 15, 1897. 15-2t.

U. S. ENGINEER OFFICE, 537 Congress St., Portland, Me., March 31, 1897.—Sealed proposals for CONCRETE MIXER, STONE CRUSHER, ENGINE AND BOILER, HOISTING ENGINE TROLLEY, DUMP CARS, RAILS AND WIRE ROPE will be received here until 3 p. m., April 24, 1897, and then publicly opened. Information furnished on application. A. N. DAMRELL, Lt.-Col., Engrs. 15-2t.

U. S. ENGINEER OFFICE, 601 18th St., N. W., Washington, D. C., April 10, 1897.—Sealed proposals for reconstruction of PIER NO. 4 OF AQUEDUCT BRIDGE across Potomac River at Georgetown, D. C., will be received here until 12 m., April 30, 1897, and then publicly opened. Information furnished on application. CHAS. J. ALLEN, Lieut.-Col., Engrs. 15-2t.

SEALED PROPOSALS will be received at this office until 12 o'clock, noon, of Wednesday, the 21st day of April, 1897, for FILLING about 10,000 cubic yards behind the Bulkhead Wall at the United States Light-House Depot, Staten Island, New York. Form of proposal and other information may be obtained on application to this office. The right is reserved to reject any or all bids and to waive any defects. D. P. HEAP, Lieut.-Col., Corps of Engineers, U. S. A., Engineer 3d L. H. District. 14-2t

U. S. ENGINEER OFFICE, Army Building, New York, April 1, 1897.—To Whom It May Concern: Whereas, the wreck of the steamship "Ailsa" has been lying in the Main Ship Channel on the east side of the Narrows, New York Harbor, since February 29, 1896, has been abandoned by owners and underwriters, and is a dangerous obstruction to navigation, notice is hereby given to all persons interested in said vessel, her cargo and other property therein, that the wreck will be removed by the United States as a derelict, under authority of law. Sealed proposals for REMOVAL OF SAID WRECK will be received here until 12 m., May 1, 1897, and then publicly opened. Information furnished on application. WILLIAM LUDLOW, Lieut.-Col., Engrs. 15-3t.

BRICK PAVING.

BRADFORD, PA., April 9, 1897.

Sealed proposals will be received by the undersigned at Bradford, Pa., up to 5 o'clock p. m. Monday, May 3, 1897, for paving with vitrified brick 3 streets, in all about 18,000 square yards. $300 certified check must accompany each bid. For specifications write Peyton B. Winfree, City Engineer.

JAS. A. LINDSEY,
15-2t. City Clerk.

SEWERS.

WILKES BARRE, PA.

Sealed proposals will be received at the City Clerk's office, Wilkes Barre, Pa., until Friday, the 23d day of April, 1897, at 12 o'clock noon, for furnishing and completing sewers in the City of Wilkes Barre, as follows:

One-half mile of five feet by three feet four inches, egg-shaped brick sewer.

Five miles of terra cotta pipe sewer, including vitrified pipe necessary for the work.

Proposals to be endorsed, "Proposals for Sewer Construction," or "Proposals for Sewer Pipe," as the case may be, and addressed to Frank Deitrick, City Clerk.

Certified checks will be required to be furnished with each proposal.

The committee reserve the right to reject any and all bids, and to award the whole or part of the work to parties bidding for the whole work.

Detailed information will be given upon application at this office.

FRANK DEITRICK,
13-2t City Clerk.

U. S. ENGINEER OFFICE, 537 Congress St., Portland, Me., March 22, 1897.—Sealed proposals for DREDGING Portland Harbor, Me., including Back Cove, will be received here until 3 p. m., April 29, 1897, and then publicly opened. Information furnished on application. A. N. DAMRELL, Lieut.-Col., Engrs. 15-2t.

U. S. ENGINEER OFFICE, 1637 Indiana Ave., Chicago, Ill., April 8, 1897.—Sealed proposals in triplicate for constructing eight miles or less of Eastern Section of ILLINOIS AND MISSISSIPPI CANAL, between Mile 8 and Mile 16, near Tiskilwa, Ill., for EXCAVATING LOCK PITS and CONSTRUCTING FOUNDATIONS for TWO AQUEDUCTS and ELEVEN LOCKS and for CONSTRUCTING TWO CONCRETE ARCH CULVERTS and SIX CAST IRON PIPE CULVERTS will be received here until 12 noon, central time, June 3, 1897, and then publicly opened. Information furnished on application here, or to Assistant Engineer, James C. Long, Tiskilwa, Ill. W. L. MARSHALL, Major, Engrs. 15-4t.

OFFICE CONSTRUCTING QUARTERMASTER of Fort Hancock, N. J., Army Building, Whitehall St., New York City, April 12, 1897.—Proposals for furnishing MANTELS FOR BUILDINGS under construction at Fort Hancock, N. J., are invited, for selection by May 10, 1897. Specifications may be seen and information obtained here. C. A. DEVOL, Capt., A. Q. M., U. S. Army.

U. S. ENGINEER OFFICE, Pittsburg, Pa., March 18, 1897.—Sealed proposals for constructing TWO LOCKS AND DAMS on Allegheny River at Six Mile Island and at Springdale, respectively, will be received here until 12 m., April 27, 1897, and then publicly opened. Information furnished on application. R. L. HOXIE, Major, Engrs. 12-4t

U. S. ENGINEER OFFICE, 136 Island Street, Grand Rapids, Mich., March 24, 1897.—Sealed proposals for REPAIRING GOVERNMENT PIER at Saint Joseph, Mich., will be received here until 2 p. m., April 22, 1897, and then publicly opened. Information furnished on application. C. McD. TOWNSEND, Capt., Engrs. 12-4t

Contract Work Should Always be Advertised in a Paper Read by Contractors.

Nearly Every Prominent Contractor and Manufacturer of Contractors' Supplies in North America Reads Engineering News.

ROAD MAKING MACHINERY

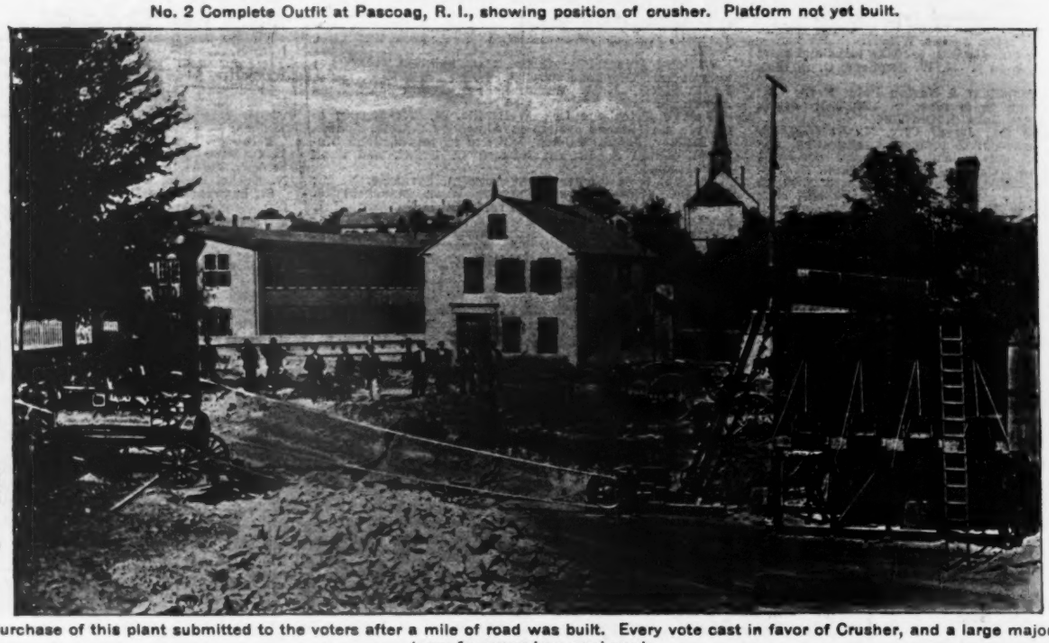
CLIMAX STONE AND ORE CRUSHER.

UNEQUALLED AND UNSURPASSED.

Our Specialty: { Complete Crushing Plants, both Portable and Stationary. Cheapest and Best for Contractors, Townships and Municipalities.

No. 2 Complete Outfit at Pascoag, R. I., showing position of crusher. Platform not yet built.

STONE CRUSHERS ELEVATORS SCREENS BINS any capacity PLOWS



Road Machines Road Rollers Engines Dump and Wheel Scrapers Vitrified Sewer Pipe

Question of the purchase of this plant submitted to the voters after a mile of road was built. Every vote cast in favor of Crusher, and a large majority for bonding the town for macadam road work.

CLIMAX ROAD MACHINE COMPANY,

Main Office and Factory: MARATHON, N. Y.

SEND FOR OUR 1897 CATALOGUE AND TESTIMONIALS. BRANCH OFFICES: HARRISBURG, PA.; PITTSBURG, PA.; WORCESTER, MASS.

SANITARY DISTRICT OF CHICAGO.

TO CONTRACTORS.

Sealed proposals addressed to the Board of Trustees of the Sanitary District of Chicago, and indorsed: "Proposal for dredging the Chicago River between its mouth and Robey street," will be received by the Clerk of the said Sanitary District in Chicago, Ill., until 12 m. (standard time) of Wednesday, the 19th day of May, 1897, and will be opened by the said Board at a regular meeting held that day or later at a special meeting called for that purpose.

The work for which said tenders are invited is the dredging of the Chicago River to such widths and depths as are shown upon the plans or as shall be directed by the Engineer between its mouth and the West Fork in the South Branch of said river and between the junction of the South Branch with the West Fork and Robey street in said West Fork; and the removal of such docks and other obstructions as may be directed by the Engineer.

The volume of material to be dredged is approximately 600,000 cubic yards, which must be excavated, removed, and disposed of without further cost to the Sanitary District than is covered by the prices named in the bid.

Each proposal must be accompanied by a certified check or cash to the amount of $2,000.

All certified checks to be drawn on some responsible bank doing business in the City of Chicago, and be made payable to the order of the "Clerk of the Sanitary District of Chicago." Said amount of $2,000 to accompany each bid will be held by the Sanitary District until all of said proposals have been canvassed and contracts awarded and signed, the return of said check or cash to the bidder to whom said work shall have been awarded being conditioned upon appearing within ten days after notice of such award being given, with bondsmen, and executing a contract with the Sanitary District for said work so awarded, and giving a bond satisfactory to the Board of Trustees for the fulfillment of the same in the amount of $25,000.

All proposals must be made upon the blank forms furnished by the Sanitary District and must give the price of each separate item of work.

The bids will be compared on the basis of the Engineer's approximate estimate of quantities, which will be furnished with copies of the specifications.

No proposal will be considered unless the party making it shall furnish evidence satisfactory to the Board of Trustees of his ability to do the work, and that he has the necessary pecuniary resources to fulfill the conditions of the contract, provided such contract shall be awarded him.

Bidders are required to state in their proposals their individual names and places of residence in full.

Specifications and plans may be seen at the office of the Chief Engineer, Rialto Building, Chicago, Ill.

The said Board of Trustees reserves the right to reject the whole or part of any and all bids.

THE SANITARY DISTRICT OF CHICAGO,
By THOMAS KELLY,
President of its Board of Trustees.
Attest: JAMES REDDICK, Clerk.
Chicago, Ill., February 24, 1897. 14-4t

U. S. ENGINEER OFFICE, Cincinnati, O., April 1, 1897.—Sealed proposals for furnishing and delivering at High Bridge, Ky., about 77,320 pounds IRON AND STEEL for improving Kentucky River, Ky., will be received here until 12 noon, May 1, 1897, and then publicly opened. Specifications furnished on application. JAS. F. GREGORY, Major Engrs. 13-3t

---

U. S. ENGINEER OFFICE, St. Augustine, Fla., March 24, 1897.—To Whom It May Concern: Whereas the navigation of Key West Harbor, Fla., is obstructed and endangered by certain wrecks, notice is hereby given to all persons interested in said wrecks, and property appertaining thereto, that, if within 30 days from the date of this advertisement, they shall not have signified their intention to me and taken preliminary steps to remove said wrecks, etc., as soon as practicable, the same will be considered as abandoned and derelict, and they will be removed by the United States under authority of law. The wrecks are designated as follows: No. 9, No. 10, No. 11, No. 12, No. 13 (Florida), No. 14, No. 15 (Cora's Boiler), and the "Governor Marvin." Sealed proposals, in triplicate, for REMOVAL OF ALL THESE WRECKS, ETC., will be received here until 2 p. m., April 24, 1897, and then publicly opened. Government reserves right to reject any or all bids and to waive any informalities. For information, apply here. By authority of the Secretary of War: W. H. H. BENYAURD, Lieut.-Col., Engrs. 12-4t

---

U. S. ENGINEER OFFICE, Oswego, N. Y., March 17, 1897.—Sealed proposals for DREDGING at Charlotte Harbor, N. Y., will be received here until noon April 16, 1897, and then publicly opened. Information furnished upon application. W. S. STANTON, Major, Engrs. 12-4t

---

U. S. ENGINEER OFFICE, Oswego, N. Y., March 23, 1897.—Sealed proposals for DREDGING at Little Sodus Bay Harbor, N. Y., will be received here until noon, April 20, 1897, and then publicly opened. Information furnished upon appliation. W. S. STANTON, Major Engrs. 13-4t

---

The Tennessee Centennial and International Exposition,

NASHVILLE, TENN.,

will open May 2 and close October 31, 1897. The Southern Railway, in connection with the Pennsylvania Railroad, is the only line operating a through sleeping-car service from New York to Nashville. The route is via Washington, D. C., Asheville and Chattanooga, leaving New York daily at 4:30 p. m., passing through the most interesting section of the South. The Tennessee Centennial is the celebration of the one hundredth anniversary of the admission of their State into the Union. It is a national event of international importance, to which the whole world is cordially invited. The construction of the different buildings and the arranging of exhibits are completed. The management is using every endeavor to bring together the most unique and attractive things procurable. The Southern Railway, with its usual liberality and foresight looking to the advancement of the whole South, has made very low rates for this occasion. For complete information and particulars regarding the great Exposition, call on or address the New York Office, 271 Broadway.

PUMPING ENGINE.

OFFICE BOARD OF WATER COMMISSIONERS, ST. PAUL, March 31st, 1897.

Sealed proposals will be received at the Office of the Board of Water Commissioners until 12 o'clock m. on the 3d day of May, 1897, for a 10,000,000-gallon pumping engine, to be erected at McCarron Lake pumping station, according to the plans and specifications on file in the office of the Board of Water Commissioners. Each proposal must be accompanied by a bidder's bond for the sum of 20 per cent. of the amount bid, or in lieu of said bond, a certified check for $3,000 on some State or National Bank in the City of St. Paul, payable at sight, to the order of the Secretary of the Board of Water Commissioners. Such check accompanying unsuccessful bid will be returned immediately after the award, rejection, or final disposition of the contract. The person or persons to whom the contract may be awarded will be required to execute the contract and give a bond for the full amount of the contract within two weeks of the date of the award, and in case of failure or neglect to do so, he or they will be considered as having abandoned it and as in default to the City of St. Paul. No bids will be considered offering less duty than 130,000,000 foot pounds. The time for the completion of the contract will date from the day of the awarding of same. The Board reserves the right to reject any and all bids. Bids must be endorsed "Proposals for Pumping Engine," and addressed to the undersigned.

Plans and specifications can be examined at the office of the Engineering News, New York city.

14-3t JOHN CAULFIELD,
Secretary Board of Water Commissioners.

STEEL PLATE CHIMNEY.

WATER-WORKS OFFICE, ERIE, PA., March 24, 1897.

Sealed proposals for the construction of a self-sustaining steel plate chimney, 75 ins. internal diameter and 175 ft. high, together with foundation for same, will be received until 4 p. m. April 17, 1897, and then publicly opened. Information furnished on application. By order Commissioner of Water-Works in the City of Erie.

14-2t WM. HIMROD, Secretary.

U. S. ENGINEER OFFICE, Boston, Mass., March 17, 1897.—Sealed proposals for DREDGING in Lynn Harbor, Mass., will be received here until noon, April 19, 1897, and then publicly opened. Information furnished on application. S. M. MANSFIELD, Lt.-Col. Engrs. 13-3t

---

NEW DRAINAGE SYSTEM OF NEW ORLEANS, LA. STEAM AND ELECTRICITY.

Sealed proposals will be received at the office of the Drainage Commission of New Orleans, La., Room No. 22, City Hall, up to NOON OF JUNE 1, 1897, for the construction of the following works, a separate bid being required for each class of work, as indicated below:

1. FOR A CENTRAL ELECTRIC POWER STATION.—This bid shall be for the construction of a central electric power station for the operation of the pumps at the several pumping stations, and shall include the foundations, buildings, boilers, generators, and lines to the pump motors, all complete. Deposit of $1,500 in cash or certified check, to accompany bid as guarantee of good faith. Bond of successful bidder, $80,000.

2. FOR PUMPING STATIONS OPERATED BY ELECTRICITY, as Follows: St. Louis pumping station No. 6, Orleans pumping station No. 7 This bid shall include the erection and installation of the three pumping stations, complete, with foundations, buildings, suction, discharge and approach basins, pumps, and electric motors. Deposit of $1,500 in cash, or certified check Bond of successful bidder, $75,000.

3. FOR PUMPING STATIONS OPERATED BY STEAM, as Follows: St. Louis pumping station No. 2, Metairie pumping station No. 6, Orleans pumping station No. 7. This bid shall include the erection and installation of the three pumping stations, complete, with foundations, buildings, suction, discharge, and approach basins, boilers, engines, pumps, pipes and stacks. Deposit of $1,500 in cash or certified check. Bond of successful bidder $75,000.

4. FOR LINED AND COVERED CANALS, viz.—St. Louis canal, Tributary canals. Bids to be at a price per unit of material, whether excavated or used in construction. This work will consist of not less than 10,000 feet of canals, eight (8) to twenty-eight (28) feet wide and six (6) to fifteen (15) feet deep. Deposit of $2,500 in cash or certified check. Bond of successful bidder, $125,000.

5. FOR OPEN AND UNLINED CANALS, which shall include excavation of new canals and enlargements of existing canals, with the construction of embankment along a part of the work. Approximate estimate 500,000 cu. yds. of excavation. Deposit of $700 in cash or certified check. Bond of successful bidder, $35,000.

Plans and specifications for the above works may be seen at the office of the commission on and after April 1, 1897.

The right is reserved to reject any and all bids. R. M. WALMSLEY, President.
F. G. FRERET, Secretary. 12-6t

PUBLIC HEARING.—There will be a public hearing by New York Harbor Line Board, 11 a. m., April 22, 1897, in Armory Building, 39 Whitehall St., New York, on applications of New Jersey Riparian Commissioners, the N. Y. & N. J. Bridge Co., and New York Dock Department, for CHANGES IN ESTABLISHED RIVER HARBOR LINES on both shores of North River, the New York part being that below 30th St. HENRY M. ROBERT, Col, Corps. Engrs., President of Board. 13-3t

CON

PERSONAL ...
Obituary ....
ENGINEERING
Coming Techn
CONSTRUCTIO
Condensed Li
Railways ....
Street and El
Electric Lig
Bridges ....
Buildings ...
Water-Works
Irrigation ...
Sewerage ...
Garbage Disp
Streets and
Manufacturin
Gas Plants .
Miscellaneou
Contract Pri
INDUSTRIAL

Mr. A. B. Li
burg, Neb.

Mr. William
sioner of Lan

Mr. Benjam
of Erie, Pa.,

Mr. P. D. C
the water-wo

Mr. John B
Denver, Colo

Mr. Joseph
the Board of

Mr. Samue
Reading, Pa.

Mr. McGre
tendent of th

Mr. D. M.
water-works

Messrs. B.
tano have b
Evansville,

Mr. F. H.
sulting Met
Brookfield,

Mr. R. C.
detached fr
Mare Islan

Mr. J. W.
Ry. at Tor
position at

Mr. Jame
his office f
100 William

Mr. H.
Street Ry.,
of the Boar

Col. Geo.
has been d
to succeed

Messrs.
mining eng
in the Fira

Mr. H. T
Telegraph
quarters a
deceased.

Mr. Asa
and Passe
pointed G
Mauch Ch

Mr. Alle
and sewer
St., Bosto
way, New

Mr. N.
partment
come the
Switch &

Mr. Cla
Superinte
appointed
with hea
Burdett.

Mr. Ge
Railway
Pump Co
to accept
& Co., C

Mr. Jo
& Weste
resigned
intenden
Vice-Pre

Mr. A
Enginee
Messrs.
third m
which t
pose of
electric